WEST PAKISTAN



Year Book

1959

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Foreword

This is the fourth edition of the West Pakistan Year Book. Momentous events have taken place since the third edition was published, and in compiling this book the achievements of the past year have, as far as possible, been described in the context of the October Revolution and the conditions of a good, honest and efficient administration brought about by it.

This year again the book is being published in Urdu, Sindhi and Pashto as well. The welcome accorded to the regional language editions last year has been most gratifying. Some useful suggestions were received about those editions, and an effort has been made this time to incorporate them. Proposals for further improvement are again invited.

Lahore :
14th August 1959

Director of Public Relations,
West Pakistan

WEST PAKISTAN

West Pakistan is the cradle of one of the oldest civilizations in the world. Archaeologists and historians trace the Indus Valley civilization to 4,000 BC. The excavations at Moenjo-Daro and Harappa only confirm their theory. Well-planned houses, public buildings, broad thoroughfares and elaborate drainage systems unearthed from the ruins speak highly of a civilized society governing its affairs in a manner that would command respect even in this twentieth century. Implements of chert and quartz and examples of pictographic art found in the valley are further evidence of the advanced culture of the hoary past.

Emerging from the glaciers of the Himalayas the mighty Indus flows through the main snowy ranges, receiving water through innumerable minor glacier-fed streams and tributaries. Through hills and dales, the Indus emerges into the plains of the former Punjab, then gently glides into the Bahawalpur division and former Sind areas down to the Arabian Sea. As in the past, the Indus is nurturing and promoting a culture suited to the genius of the people of the area. The only difference brought about by the advent of the modern age is that the beneficent effects of the mighty river are now being felt not only along its 1,500-mile route but also in its adjoining areas. The valley is irrigated by four other rivers—the Jhelum, the Chenab, the Ravi and the Sutlej. Though not as big as the Indus, they play an important part in the life and economy of the 700-mile long valley. The life-giving water and invaluable alluvium brought by them make the valley one of the richest wheat- and cotton-growing areas in Asia. The power generated by these rivers is bringing into existence big and small industrial units to increase the prosperity of the area. Along with other resources, both human and material, the five rivers are making a valuable contribution to the promotion of a common culture.

Physical Features

Lying between 24 and 37 degrees north and 61 and 67 degrees east, West Pakistan presents great variations in landscape. From the snow-covered peaks in the north, many of them touching 25,000 feet, the landscape slopes down southward. The valley of the foothills is full of orchards, while the reverine plains are wide expanse of golden wheat land irrigated by a vast network of canals. Its barren sunburnt hills, rent by huge chasms and gorges, alernate with sandy deserts and stony plains. The sea coast is arid and

devoid of vegetation, but the sea itself is full of a large variety of fish, which supports a big industry. The people are, therefore, sturdy and industrious and skilled in various handicrafts.

Climate

Winter, summer and the rainy season set in at regular intervals. In some parts of the province, winter is extremely cold but generally dry. Summer starts in mid-April, and during the following three months the temperature in the plains occasionally touches 120 degrees Fahrenheit. It is then that most of the well-to-do persons move on to the hill resorts of Murree, Ziarat and the Galies. Most of the province has a cool and pleasant climate from November to March.

Unlike East Pakistan which has average of from 70″ to 400″ monsoon rains, in West Pakistan maximum monsoon rains annually average about 10″ to 15″ and that too in the areas of the former Punjab alone. These rains are caused by the north-west monsoon and also by the north-east cyclones during winter. In the former Sind, the rainfall is sparse and in the former Baluchistan it is practically nil, while the former NWFP depends for its modest rainfall on the north-east cyclones.

Frontiers

Only a thin stretch of mountains in the north separates West Pakistan from the USSR. It adjoins Iran and gfaAnistan in the west and the north-west and the Indian states of East Punjab and Rajasthan in the east. To the north lies the disputed state of Jammu and Kashmir and to the south and south-west the Arabian Sea with a coastline of about 610 miles.

Minerals

A geological survey of the province has shown that there are deposits of antimony, asbestos, barytes, beryl, chromite, coal, copper ores, fluorspar, grass sand, laterite, iron ore, magnesite, managanese, phlogopite, phosphatics, potash and magnesium salts, quartz crystals and vermiculite.

Deposits of iron ore have been discovered at various places in West Pakistan, particularly in the Mianwali, Sargodha and Attock districts and in the Chitral state. A giant steel project has been approved, and details are under consideration to decide the type and capacity suited to national needs. The coal output has increased to 500 tons a day. Great advances have been made in the production of petroleum and natural gas. The natural gas from Sui is bringing about a silent revolution in the economy of the province, as cheap power is being provided to larger number of industrial units. The province has the largest salt deposits and the second largest chromite deposits in the world.

Exports

Besides exporting cotton of the finest variety, West Pakistan has also been exporting wool and hides and skins of

animals fed on its green pastures. Cotton yarn and coarse cotton cloth is also on the export list. Sialkot is well known for its sports and surgical goods industries in the world markets. Efforts are now being made to organise the sale of handiworks, including pottery, camel skin products and wood and lacquer work.

Area and Population

West Pakistan sprawls over 309,424 square miles and covers more than 80% of the total area of Pakistan. According to the 1951 census, the population of the province is 32.652 millions, with males having a majority of over two millions. The population per square mile varies with the natural and other conditions, and ranges between 6 per square mile in the arid Kalat to 586 in the Lahore division. The urban population in the whole of West Pakistan (excluding the Karachi federal area) is 15·2%. Muslims form 97·1% of the total population.

People and Customs

Majority of the people inhabiting West Pakistan are Aryans by race and origin. Lying at the eastern foot of the Irano-Afghan plateau, the province has been described as the 'ancient meeting ground of cultures and commerce'. The Greeks, the Arabs, the Turks, the Mughals and other races were attracted by its fertile lands, beautiful green valleys and its prospering trade and commerce. Some of them chose to make their homes in this land, and during the course of time they all have intermingled in varying degrees. Only those living in far-flung, isolated places escaped assimilation. Today all of them live peacefully and happily, and racial differences are hardly noticeable in any walk of life. The people's mode of living, occupations and degree of prosperity vary from place to place in accordance with the natural conditions. Since 14th October 1955 when the various provincial and state units were integrated to form the province of West Pakistan, they have become administratively and politically one. Unification of the province is also leading to a greater understanding of each other as tribes and races.

The people of the province, as in the past, mostly depend on agriculture for their livelihood. That is why 85% of the population is rural. A severe climate coupled with rough land, however, does not permit the hardy tribesmen of the hilly tracts in the north-west regions to depend on agriculture alone. To escape the rigours of a dry winter, they migrate to the central and southern regions where the main occupation is agriculture.

Most of the festivals of the people of West Pakistan originate from their Muslim heritage. Eed-ul-Fitr and Eed-ul Azha are celebrated in almost the same manner throughout the province. There are not many local festivals, but those celebrated are extremely colourful and typical of rural life. The quality of the dress

depends upon the purse, but there is a marked similarity in form all over the province. The popular male dress is turban, shirt and *shalwar*. The *tehband* predominates in the rural areas of the former Punjab and Bahawalpur. The women in different regions have, however, different tastes but *shalwar-kamees-dopatta* combination is most popular.

Similarly, the food habits of are almost the same. Wheat, meat and vegetables form the staple diet. Rice is taken in fairly large quantity in the central zone, while people in the north generally prefer roasted meat to curry. Fish is taken in all parts. Curd and *lassi* are especially popular with the people in the central zone.

Language

English still remains the official language in the province, but Urdu is expected to acquire this status in the future. Other regional languages are Sindhi, Pushto, Punjabi and Baluchi, which are written in substantially the same script. Since sufism had a dominating influence in the area, the regional languages show remarkable unity of thought, ideology and atmosphere. Some disruption in the continuity of the common Muslim tradition was discernible only when the non-Muslim culture dominated. With the establishment of Pakistan in general and the integration of West Pakistan in particular the process of cultural unification has received greater impetus.

Art and Literature

The roots of West Pakistan's culture can be traced into the Indus Valley civilization—one of the greatest pre-historic civilizations of the world. It is remarkable that a multitude of older ideas and achievements have been happily blended with the Islamic tradition. The result has been a living, dynamic and distinct culture. From the days of Moenjo-Daro, Harappa and Taxila, the people of the province have been mostly agriculturists, giving an agrarian colour to their culture which they had enough means and leisure to develop. It is the great river system of the Indus that gives West Pakistan its geographical unity, and as Sir Mortimer Wheeler, the great archaeologist, points out, this tremendous factor, the Indus Valley, and its age-long links with the Irano-Afghan plateau, combine to stamp the personality of West Pakistan.

All the invaders, conquerors and traders who stayed behind responded to the new environment and cultural atmosphere and helped evolve a harmonious culture. The details differ in the various regions, but the basis remains the same. The literature, art, architecture and painting display an underlying unity born out of a common cultural heritage.

The Muslims brought with them well-developed traditions in architecture; and the more lasting buildings—the

work of the Turks, the Afghans and the Mughals—are all essentially Muslim buildings. An important characteristic of Muslim architecture, even art, is its clarity and beauty of form. The Muslims evolved about thirteen different styles in the sub-continent. Though some of the noblest examples of the Muslim skill have been left in India, Pakistan remains the rightful heir to all the cultural traditions and achievements of Muslims in the sub-continent.

In the field of art, a great contribution by Muslims was the development of miniature painting. The Muslim influences resulted in the establishment of the Mughal and Rajput schools. Demanding wider expression for their aesthetic sense than that provided by the miniature, the artists are finding new avenues. To them subjects like the sufferings of a refugee, life of the peasantry, the dignity of labour and natural calamity need more and loftier expression.

In poetry, both national and regional, there is an international basis and essential continuity of Muslim cultural tradition. The Muslims of Pakistan have been multilingual, and even today people use more than one language with equal fluency. Allama Iqbal, the poet-philosopher of Pakistan, has written some of his best works in Persian, which have drawn generous praise from Iranian scholars. Some modern writers have wielded their pen with equal success in both English and Urdu.

The regional literatures have deep roots into the traditions and folk-lores of their respective areas. But even there the common Muslim cultural heritage had its effect, and most of the legendary figures in Muslim history find a place in them. The hardy life of men struggling for existence in the barren rocks and sandy tracts is fully reflected in Pushto. Besides the epic ballads, Pushto is a rich storehouse of love lyrics, mystic utterances, natural scenery and human ideals. Khushal Khan Khattak, Rahman Baba and Abdul Hamid are heard with rapt attention by all lovers of this language.

Punjabi literature draws its inspiration mainly from village life, and numerous folk romances—*Heer Ranjha, Sassi Pannu, Sohni Mahiwal, Mirza Sahiban* and *Puran Bhagat* among them—are most popular and have gone a long way in enriching the language. The first three romances form the basis of all Punjabi mystic poetry. Waris Shah is easily the most popular of the Punjabi poets, and his *Heer Ranjah* is considered to be a masterpiece.

Sindhi is one of the oldest regional languages, and Shah Abdul Latif of Bhit wrote couplets in chaste Sindhi, without many Arabic and Persian words. Shah Latif's poetry breathes the spirit of the calm and divine content. He also introduced the ballad in

Sindhi and has written popular versions of *Sassi Pannu* and *Sohni Mahiwal.*

Many of the Baluchi-speaking people also speak Sindhi, Punjabi and Siraiki (Luhnda) according to the place of their residence. Baluchi is spoken in Sulamani and Makrani dialects, and is famous for its epic poetry which includes the heroic ballads forming the oldest and most important part of traditional Baluchi lore. Romantic ballads, religious and didactic poetry have also been written in this language. Realising the cultural needs and aspirations of the people, the West Pakistan Government has allocated substantial funds for the promotion of literary and cultural activities in the province. The government patronises and helps organisations engaged in furthering literary and cultural activities. Among the institutions receiving government grants are the Board for the Advancement of Literature (Lahore), the Sindhi Adabi Board (Karachi) and the Pushto Academy (Peshawar). A substantial amount has also been allocated for the establishment of a cultural centre at Bhit Shah.

GENERAL ADMINISTRATION

The night between 7th and 8th October 1958, which brought the peaceful revolution and the imposition of martial law in Pakistan, changed the entire structure and concept of government in West Pakistan, as it did away with the so-called representative form of government and in its stead gave to the people a firm but benign administration working solely for the public welfare without any considerations of political advantage.

The revolution was unique in the sense that it was not only unaccompanied by bloodshed and violence but was actually hailed by the people. So much so, that when after some time direct military control from departments and public affairs was withdrawn, there was a unanimous protest from the people that this had been done too soon. But wisely the Chief Martial Law Administrator, in the person of the President, General Muhammad Ayub Khan, decided that the routine administration was the work of the civil services who should be able to run it satisfactorily now that political influences were no longer in play. Consequently they were given a free hand, and the cover of martial law was provided only at the highest level.

Revolution in Attitudes

A description of the changes brought about by martial law would require a book in itself. Peaks of efficiency, honesty and public service were reached as were unimaginable in the days of political party governments, and rarely seen even during the much-vaunted British administrative rule. Both in the official machinery and in the public field the entire attitude towards work and matters affecting the daily life of the citizen witnessed a healthy transformation, and it seemed as if some diabolic spell under which revelled corruption, dishonesty, bribery, nepotism and other forms of misdemeanour, had been broken. The accent shifted at once from political gain at the expense of the people to unselfish achievement of the public good. These revolutionary happenings also entailed drastic changes in the administrative set-up, and all-out efforts were made to evolve a system which could give the utmost satisfaction to the people at the minimum of expense.

Advisory Council

The ministry and the legislative assembly having been dissolved on 8th October, all power now vested in the Governor. A high-powered Advisory Council consisting of the Martial Law Administrator, West Pakistan, and the senior-most officers in the administration was set up soon after the revolution. This council acts as a sort of

cabinet, and for all intents and purposes is the highest administrative body in the province.

Local Bodies Dissolved

In November 1958, all the elected district boards, municipal committees and other local bodies in the province were superseded in order to wipe out political factions prevailing therein and to rid them of maladministration and jobbery rampant among them. All political figures who almost without exception had been misusing their influence and powers were removed from the scene and replaced by officials to look after the affairs of local government.

The Advisory Council redelegated the powers of control and action in respect of local bodies to the divisional commissioners and district officers in order to improve the working of these bodies, eliminate delays and facilitate quick and popular decisions. These powers were, in fact, delegated to the officers at the time of integration of West Pakistan but were later withdrawn, as the provincial ministers were loth to surrender them to a lower level and thereby lose the power to please and placate their supporters. This action had resulted in infinite difficulties for the people of outlying areas who had to proceed to the provincial capital even for the settlement of their day-to-day affairs.

Officers responsible for the collection of industrial data under the Industrial Statistics Act 1932 were also delegated vast powers to help them institute prosecutions against those who submitted wrong returns.

Supply Department Abolished

In December 1958, the Directorate of Supply was abolished to effect economy and rationalisation of supply work. The main functions of this department, which was created in May 1958 by the former ministry, were to make purchases within the country and abroad for all departments of the provincial government and to deal with the civil supplies work like control over prices and distribution of all commodities except food.

The Advisory Council further decided that government-owned staff cars and other vehicles should be in the charge of the Services and General Administration Department, industrial raw materials, including iron and steel, should be handled by the Industries Department, while the distribution of newsprint should be the responsibility of the Information Department. All other commodities were to be dealt with by the Food Department.

Purchase of Stores

The Director of Industries was again appointed *ex-officio* Stores Purchase Officer to the government, and a separate supply wing was created in his department. Civil supplies went back to the Department of Food.

Awards for Self-help

On a suggestion from the President of Pakistan, the provincial government decided in January 1959 to grant civil awards for outstanding examples of voluntary work both in the urban and rural areas. The awards will be in the shape of *sanads* called the Government *Sanad* (Class I); the Commissioner's *Sanad* (Class II); and the Deputy Commissioner's *Sanad* (Class III). Special trophies will be introduced on *tehsil* basis and will go to villages which give the best performance in the defined spheres of self-help. These trophies will be retained by the village *panchayats* on a yearly basis. Cash rewards will also be introduced, and for this purpose sufficient funds will be placed at the disposal of the Commissioners and Deputy Commissioners.

National Reconstruction

On 17th February 1959, a Provincial Board and a Bureau of National Reconstruction were set up under the chairmanship of the Governor on the lines of the board and bureau established at the centre. The Secretary to Government in the Information Department is the convener of the board and Director of the Bureau of National Reconstruction, the bureau operating as the secretariat of the board. The bureau's main function is to guage public opinion on all matters of vital national importance in order to help formulate policies of the government in deference to the wishes of the people.

Overhauling the Administration

The Pakistan Government has set up a number of high-level commissions to go into the many matters of public concern which need reform. Of these, the Provincial Administration Commission is of great importance. Working under the chairmanship of the West Pakistan Governor, the commission is to examine the respective spheres of responsibility of the provincial, divisional and district administrations in order to determine their suitability to meet regional needs and the requirements of public weal. Particular attention will be paid by the commission to see that matters directly affecting the life of the people are dealt with expeditiously and as far as possible by competent local authorities so as to cause the least inconvenience to the public.

The commission will make such recommendations as may be necessary for the re-constitution of the administrative divisions and districts in the province into homogeneous areas invested with clear-cut authority, the maximum delegation of responsibility and adequate financial powers.

Screening of Officials

In pursuance of the provisions contained in the Public Conduct (Scrutiny) Ordinance 1959, five screening committees were constituted in February 1959 to scrutinise severally the work

and conduct of the various categories of government servants, other than peons and other Class IV servants.

The screening of Class I and certain categories of Class II officers was conducted for corruption, misconduct and inefficiency, while the remaining categories were screened only for inefficiency. Show-cause notices were duly served and an opportunity was afforded to everyone to clear themselves before the screening committees.

The committees completed their work all over the province by 30th June 1959 and recommended action against 2,330 officials. Accordingly, 79 officials were dismissed, 175 removed from service, 665 compulsorily retired and 424 reduced in rank for corruption, reputation for curruption, inefficiency and misconduct.

Six Class I and eight Class II police officers were compulsorily retired; seven Class I and Class II civilians were dismissed, six removed from service and 14 compulsorily retired; three Class I engineers were dismissed and seven compulsorily retired; two Class II engineers were dismissed and seven placed on the compulsorily retired list; one District Food Controller was dismissed and a Conservator of Forests sent on forced retirement.

With the exit of inefficient and corrupt officials, the administration of the province showed a marked improvement. It was evident that the new regime was not going to tolerate shirkers and malingerers and those in the habit of taking undue advantage of their official position. Another significant development in this behalf was that immediate officers were clearly informed that henceforth they would be directly held responsible for the undesirable acts of their subordinates, and so they should exercise greater vigilance on these officials for their own good.

Gwadar

On 8th September 1958 an enclave on the Mekran coast of West Pakistan, known as the territory of Gwadar, was transferred to Pakistan by the Sultan of Muscat and Oman. The territory was declared a part of the West Pakistan province by the President.

Gwadar is a sea-port between Pasni and Jiwani, about 300 miles west of Karachi and about 45 miles from the Iran-Pakistan border. It is a natural port and can be developed into a fine harbour.

With the merger of Gwadar, the provincial government took immediate steps to extend its services to the enclave so that the people there should no longer be deprived of the benefits normally accruing to the citizens of a welfare state. In addition, therefore, to taking over the administration of Gwadar, the government directed its nation-building and benficent departments to chalk out schemes to include the former enclave within the scope of their activities.

Secretariat

Certain changes were effected in the West Pakistan Government's Secretariat during the year, and instead of 15 there are now only 12 permanent departments. These are as under:—

1. Irrigation, Communications and Works.
2. Planning and Development.
3. Education.
4. Finance.
5. Food.
6. Services and General Administration.
7. Medical and Local Government.
8. Home.
9. Industries and Commerce.
10. Information.
11. Law.
12. Revenue and Rehabilitation.

Planning and Development

To ensure co-ordination between various provincial departments connected with economic planning and development, and to provide efficient liaison between the central and provincial governments in this field, the Government of West Pakistan established last year a full-fledged Department of Planning and Development.

The new department primarily acts as a processing agency with regard to the development schemes of all provincial government departments. Recently, it considered their preliminary development schemes in consultation with the central ministries and the Planning Commission. Apart from general discussion of sector programmes, individual schemes proposed by the departments were also thoroughly gone into and examined at length. As a result of these deliberations the total development programme of the West Pakistan Government proposed for inclusion in the Second Five-Year Plan was reduced to Rs. 5,060 million from the original figure of Rs. 6,790 million.

The Planning and Development Department has also addressed itself to a short-term programme, known as the 15-month programme to cover the period from April 1959 to June 1960—the last lap of the First Five-Year Plan.

Bureau of Statistics

One of the basic necessities of sound economic and social planning is availability of timely, reliable and current statistics. Without these statistics there can be no well-based planning and implementation of development programmes. In view of this fact the Bureau of Statistics, which was brought into being in October 1957, has been attached to the Planning and Development Department.

The bureau acts as a source of statistical data, advice and assistance; it is to establish statistical standards and procedures for the provincial departments in order to develop and integrate statistical programme. It collects and

interprets primary statistical data by sample surveys and census and publishes literature for the dissemination of statistical information. The Boards of Economic Inquiry at Lahore and Peshawar are also doing useful work in this field.

Service Rules

A sub-committe was formed in January 1959 to scrutinise service and recruitment rules of all government services. Model rules have been prepared by this sub-committee and sent to all the government departments to enable them to draw up their service rules on that pattern, keeping of course their own requirements in view.

Wider Powers

As recommended by the Council for Administration of West Pakistan, the provincial government has delegated wider administrative and financial powers to the heads of attached departments and regional and divisional officers to enable them to settle the local problems expeditiously. This will redress to a large extent the grievance that the people of distant areas have to come to Lahore even for the solution of their small problems, and is in consonance with the general policy of the new regime to achieve greater decentralisation.

The delegation orders, which were finalised and issued during the year, are under the following heads :—

(*a*) Administrative powers ;

(*b*) Powers under the civil service rules ;

(*c*) Powers of re-appropriation ; and

(*d*) Powers under the financial rules.

In the end of July 1959, members of the provincial Revenue Board were also given extensive powers for the sale, auction and lease of state lands. These powers at a lower level, were further given to Commissioners and Deputy Commissioners so that locally they could deal with this matter without referring it to the government.

Reorganisation Committee

A Provincial Reorganisation Committee has been set up to suggest ways and means to increase efficiency in the services, decrease expenditure and to effect readjustments in the staff. This committee will go to each government office by turn and decide in consultation with that office how best its affairs can be conducted at the maximum level of efficiency with the existing staff and the prevailing method of work.

New Legislations

The Law Department which is concerned with tendering legal advice to the government in matters of vital import and drafting of the legislations and their amendments showed marked activity during the past year. Through its efforts as many as forty-two enactments, including a number of amending laws and ordinances, were finalised and published. Of the legislations passed by

the new regime the most important are the West Pakistan Urban Rent Restriction Ordinance 1959; the West Pakistan Juvenile Smoking Ordinance 1959; the West Pakistan Rangers Ordinance 1959; the West Pakistan Usurious Loans Ordinance 1959; the West Pakistan Gwadar (Extension of Laws) Ordinance 1959; the West Pakistan *Waqf* Properties Ordinance 1959; the West Pakistan Control of *Goondas* Ordinance 1959; and the West Pakistan Goats (Restriction) Ordinance 1959.

The Urban Rent Restriction Ordinance tends to secure the rights and interests of both the owners and tenants of urban property and aims at checking the upward trend in the rents of residential premises actuated by the prevailing housing shortage. The ordinance lays down the procedure for the fixation of the various categories of urban properties. The *Goondas* Control Ordinance is a great improvement on the old law and provides facilities of defence to the victims. The anti-goat ordinance envisages the gradual elimination of this animal by restricting and controlling its pasturing and keeping it in particular areas. This legislation will go a long way to protect vegetation from the onslaughts of goats who are a great menace to forests and indirectly help in soil erosion. The *Waqf* Properties Ordinance incorporates provisions for utilization of *auqaf* incomes for beneficent public purposes.

The following is a list of the ordinances drafted by the Law Department and promulgated by the Governor during 1959. The date on which they were published in the gazette is given against each: –

1. The West Pakistan Land Dispositions (Saving of *Shamilat*) Ordinance (27th January 1959).
2. The West Pakistan Requisitioning of Immovable Property (Temporary Powers Amendment) Ordinance (31st January 1959).
3. The West Pakistan Finance Act (Amendment) Ordinance (12th February 1959).
4. The Sind Acts (Extension to Khairpur District) Ordinance (16th February 1959).
5. The Sind Land Revenue Code (West Pakistan Amendment) Ordinance (20th February 1959).
6. The West Pakistan Urban Rent Restriction Ordinance (23rd February 1959).
7. The West Pakistan Agricultural Bank (Recovery of Dues) Ordinance (24th March 1959).
8. The Provincial Insolvency (West Pakistan Amendment) Ordinance (25th March 1959).
9. The West Pakistan Tobacco Vend Act (Amendment) Ordinance (24th March 1959).
10. The West Pakistan Urban Immovable Property Tax Act (Amendment) Ordinance (25th March 1959).

11. The West Pakistan Hindu Women's Rights to Agricultural Land Ordinance (26th March 1959).

12. The West Pakistan Juvenile Smoking Ordinance (26th March 1959).

13. The West Pakistan Water and Power Development Authority (Amendment) Ordinance (27th March 1959).

14. The West Pakistan Rangers Ordinance (28th March 1959).

15. The Kalat Criminal Procedure Code (West Pakistan Amendment) Ordinance (30th March 1959).

16. The West Pakistan Finance Act (Second Amendment) Ordinance (30th March 1959).

17. The West Pakistan Appropriation Ordinance (30th March 1959).

18. The West Pakistan Usurious Loans Ordinance (1st April 1959).

19. The Thal Development (West Pakistan Amendment) Ordinance (6th April 1959).

20. The Kalri Lake Development Ordinance (13th April 1959).

21. The West Pakistan *Waqf* Properties Ordinance (17th April 1959).

22. The West Pakistan Undesirable Companies Ordinance (22nd April 1959).

23. The Panjab University (West Pakistan Amendment) Ordinance (23rd April 1959).

24. The West Pakistan Adaptation and Repeal of Laws (Amendment) Ordinance (27th April 1959).

25. The Police (West Pakistan Amendment) Ordinance (6th May 1959).

26. The Sind University (West Pakistan Amendment) Ordinance (8th May 1959).

27. Sind Excise Laws (West Pakistan Amendment) Ordinance (9th May 1959).

28. The West Pakistan Agricultural Pests Ordinance (11th May 1959).

29. The Punjab Land Revenue (West Pakistan Amendment) Ordinance (12th May 1959).

30. The Khairpur District Municipal (Establishment) Ordinance (12th May 1959).

31. The Punjab Agricultural Markets (West Pakistan Amendment) Ordinance (15th May 1959).

32. The West Pakistan Highways Ordinance (23rd May 1959).

33. The Cinematograph (West Pakistan Amendment) Ordinance (25th May 1959).

34. The West Pakistan Survey and Rectangulation Lands Ordinance (1st June 1959).

35. The West Pakistan Control of *Goondas* Ordinance (4th June 1959).

36. The West Pakistan Gwadar (Extension of Laws) Ordinance (16th June 1959).

37. The West Pakistan Supplementary Appropriation Ordinance (29th June 1959).

38. The West Pakistan Vaccination (Amendment) Ordinance (30th June 1959).

39. The West Pakistan Appropriation (Amendment and Extension) Ordinance (30th June 1959).

40. The West Pakistan Appropriation (Second) Ordinance (30th June 1959).

41. The West Pakistan Finance Ordinance (30th June 1959).

42. The West Pakistan Goats (Restriction) Ordinance (18th July 1959).

FINANCES

The revenue receipts of the province for 1956-57 (the year of integration) were Rs. 590 million. For 1959-60, they have been estimated at Rs. 770 million. The revenue expenditure has gone up from Rs. 550 million to Rs. 725 million, both sides registering an increase of 30%. This displays the growing fiscal strength of the province and the tempo of activities in the public sphere. The increase in expenditure is most marked in respect of the beneficent departments where it has increased from Rs. 200 million in 1956-57 to Rs. 288 million estimated for the current financial year. This means an increase of about 45%.

Interim Budget

In January last it was decided by the new government to change the financial year from April-March to July-June. Accordingly, it became necessary to extend the financial year 1958-59, through a special ordinance, so as to end on 30th June 1959. An interim budget for the period from 1st April to 30th June 1959 was also passed.

The revenue receipts for the interim quarter were estimated at Rs. 156·2 million while the revenue expenditure was placed at Rs. 151·2 million, leaving a surplus of Rs. 5 million. The beneficent departments were allocated a sum of Rs. 59·8 million, or 30·5% of the budget.

Budget for 1959-60

As already stated, there has been a gradual and healthy improvement in the budgetary position of the province. The position in respect of the year 1959-60 beginning from 1st July is tabulated below :—

REVENUE SECTOR

(*in millions*)

Revenue Receipts.	774	Expenditure chargeable to Revenue.	724·9

CAPITAL AND DEBT SECTOR

Receipts on account of Public Debt.	750·5	Capital Expenditure on account of Public Debt.	232·5 421·8
Receipts on account of Loans and Advances.	24	Expenditure on Loans and Advances	300
	784·5		954·3
Total Receipts credited to the Provincial Consolidated Fund.	1,558·5	Total expenditure met from the Provincial Consolidated Fund.	1,679·2
Receipts credited to the Public Account of the Province	2,153·6	Expenditure on Public Account.	2,147·9
Total Provincial Receipts	3,712·1	Total Provincial Disbursements.	3,827·1

It will be seen that the expansion is not confined to the revenue sector alone. Compared with the budget for 1958-59 (ending 31st March), capital receipts have gone up by Rs. 231·3 million

and capital expenditure by Rs. 373·9 million, the estimates for that year being Rs. 553·2 milion and Rs. 580·4 million respectively. Similar is the case with the estimates for the public accounts of the provinces. The estimates for last year in this sector were Rs. 1,412·4 million and Rs. 1,810·2 million for receipts and disbursements respectively.

On the revenue side, the main items of expenditure are: beneficent departments Rs. 288·2 million; civil works Rs. 50·8 million; Frontier Regions Rs. 39·8 million; forests, salts and opium Rs. 27·5 million; and general administration 133·1 million. Provisions for these items for 1958-59 were Rs. 280·2 million, Rs. 44·5 million, Rs. 27·8 million, Rs. 24·2 million and Rs. 128·2 million respectively. Detailed allocations in respect of the beneficent departments are Education Rs. 119·6 million; Health Service Rs. 45·6 million; Agriculture Rs. 70·5 million; Veterinary Rs. 11·2 million; Industries Rs. 13·4 million; and Co-operation Rs. 4·6 million.

Revenue receipts of Rs. 165·3 million are likely to accrue from land revenue; Rs. 159·2 million from central refund; Rs. 71·2 million from water rate; Rs. 22 million from electricity; Rs. 30·6 million from forests, opium and salt; Rs. 78·4 million from the beneficent departments and Rs. 13·3 million from the Central Administration Department. In addition, Rs. 71·7 million are likely to be received from the central government as grants-in-aid.

The estimates on capital side are :—

Receipts	*(In millions)*
(1) Loan from Central Government	188·5
(2) Foreign Aid ..	100·3
(3) Market Loan ..	50
(4) Recoveries of Loans and Advances	24
(5) Revenue Surplus ..	47·6
(6) Receipts and Recoveries on Capital Accounts including grants-in-aid.	66
(7) Other Resources ..	28·4
(8) Expected Short-fall in expenditure	114·6
Expenditure	
(1) Irrigation ..	272·1
(2) Electricity ..	200·6
(3) Agricultural Sector ..	58·1
(4) Transport and Communications	16·8
(5) Housing, Administrative Buildings, Town Development and Public Health	37·4
(6) Education, Health and Social Welfare	12
(7) Other Expenditure ..	22·4

Two taxes in the form of rationalisation and unification of *abiana* rates and the development cess have been levied. Rates of *abiana* have been different in various regions of the province and were out of tune with the agricultural income, as they were fixed some 25/35 years ago when the prices of agricultural commodities were very low. An additional income of Rs. 30 million is expected to be realised from this. Development

cess at the rate of two annas per rupee of land revenue in the former Punjab and Bahawalpur, and at the rate of 25% of land revenue in the former NWFP was hitherto in force. Now this cess will be levied at the rate of 25% of land revenue throughout West Pakistan, except in the Kalat division and the Special Areas. This will being in additional Rs. 15 million. Other special features of the budget are :—

(1) Rs. 4 million have been earmarked for activities of the divisional development boards. The provision for 1958-59 was Rs. 3·6 million.

(2) Rs. 380,000 have been allocated to the relief fund for low-paid Government servants.

(3) Rs. 1,328,000 have been provided for scholarships for training in foreign countries.

(4) Rs. 600,000 are to go to the Olympic Stadium Fund.

(5) Rs. 1 million are earmarked for compulsory military training.

(6) Rs. 231,000 will be utilised for the promotion of games and sports.

(7) Rs. 32·2 million have been provided for social uplift.

Relief to Low-paid Officials

With a view to affording some relief to low-paid government servants, the West Pakistan Class IV Government Servants Relief Fund Rules 1959 were issued, according to which :

(*a*) a class IV government servant while in service will be entitled to receive a grant of Rs. 100 on the marriage of every daughter of his; and

(*b*) the family of a class IV government servant will be entitled to receive a grant of Rs. 200 upon his death before retirement for his funeral expenses.

The work-charged establishment has been allowed leave and holidays as follows :—

(*i*) Leave on all Sundays and gazetted holidays;

(*ii*) Casual leave at the following scales: —

(*a*) Twenty days in a year for persons with more than five years continuous service.

(*b*) Ten days in a year for those with service between two and five years.

(*c*) Five days in a year for those with less than two years but more than one year's service.

With effect from 12th March 1958 the posts of staff car drivers were made pensionable. They are now entitled to count their entire previous continuous service towards pension.

Pay Scales

The West Pakistan (Non-Gazetted) Civil Services Pay Revison Rules 1959

were issued during the year. Under these rules, the pay-scales of corresponding categories of non-gazetted government servants belonging to different integrating units have been unified and rationalised and the existing disparaties removed.

All non-gazetted government servants who were in service of an integrating unit on the 13th October 1955 have been given the right to opt for the existing scales or the prescribed scales, whichever are more beneficial to them. Pay scales in the tribal agencies have also been brought at par with those in the adjoining setteled districts.

Delegation of Powers

The scheme of integration of West Pakistan into a single province contemplated delegation of powers at various levels so that the common man may not have to undertake long journeys to the provincial capital for the solution of his problems. The first delegation which was made in February 1956 was an improvement on the position prevailing earlier in the integration units. But experience showed that this was not adequate and in any case it did not fully take into account the peculiar requirements of government department. A decision was, therefore, taken that further delegation might be made separately for each department, and that this should be all along the line, so that powers delegated by government do not remain concentrated in the office of the head of a department, but go down to all levels in the regions and districts.

This process was hanging fire for quite some time but on the advent of the present regime it was expedited and extensive delegation of powers have been made in the case of all departments. The general pattern of this delegation is that powers which were previously exercised by the government have now largely been delegated to the heads of attached departments, while powers of the latter have mostly been delegated to the regional and divisional heads and so on.

Leave Concessions

Leave rules applicable to government servants with less than three years continuous service have been framed. Leave on average pay has been allowed to all government servants at the rate of 1/22nd of the period spent on duty. Leave on medical certificate on half average pay is admissible to an employee who has completed one year's continuous service, for a maximum of 15 days, if he is in superior service, and 10 days if he is in Class IV service, for every completed year of service. Extraordinary leave is admissible for a period not exceeding three months on any one occasion.

With effect from 9th May 1958 the maximum limits of leave salary for all kinds of leave, i.e. leave on average pay, leave on half average pay, leave on quarter average pay, etc., have been abolished. This concession has not,

however, been allowed with regard to the maximum limit of Rs. 2,100 per mensum up to which leave salary may be drawn in sterling and other foreign currencies, if leave is spent outside Asia.

In order to reduce foreign exchange expenditure on payment of leave salaries abroad, the government has decided that government servants appointed after 17th May 1958 should draw their leave in rupees in Pakistan irrespective of the country where they spend their leave. For those appointed before this date, leave *ex*-Asia will be granted only for reasons of health, pilgrimage, etc. These restrictions will not apply to officials of non-Asiatic domicile or those who under the terms of their contract are entitled to spend their leave *ex*-Pakistan.

Travel Risks

A government servant with a salary exceeding Rs. 750 per month travelling by air shall be insured for each flight at government expense. He may insure himself with a reputable insurance company for a sum not exceeding 30 times his monthly pay and may recover the premium paid on that account along with his travelling allowance.

If such a government servant is injured or killed as a result of an accident he shall be entitled to disability or family pension under the relevant extraordinary pension rules.

Concession During Training

No uniform policy was being followed in the various integrating units regarding the precise amount of pay and allowances that should be allowed to a government servant during the period of his training. The following policy in this respect has been framed for direct recurits in all services of the provincial government.

(*i*) Where the period of training prescribed is less than or up to one year, salary during training will be ¾ of the initial pay *plus* usual allowances.

(*ii*) Where the period of training exceeds one year, pay during the first year of training shall not exceed ¾ of the initial pay, and for every subsequent year of training the pay may be raised by the amount of annual increment admissible. The official will also draw the usual allowances admissible on the reduced pay.

(*iii*) The cases of those already in government serivce will be governed by the provisions of rule 4·3 of the Civil Service Rules (Punjab), Volume I, rule 35 of Sind Civil Service Rules, and rule 20 of the Fundemental Rules.

Subsistence Allowance

All government servants have become entitled, during the period of their suspension from duty, to a subsistence grant at the rate of ½ of their pay

which they were drawing immediately before their suspension and which they would have continued to draw, had they been not placed under suspension. The suspending authority may further grant to a government servant under suspension such compensatory allowances as the competent authority may sanction from time to time.

Home Visits

The government has allowed concessions for home visit to government servants who were displaced as a result of integration and who were otherwise not liable to be transferred. This concession will be availble to those whose salary does not exceed Rs. 500 per month, irrespective of the fact whether they are gazetted or non-gazetted. Each official availing of this concession will have the option to claim travelling facilites for his dependents, up to a maximum of three to his place of permanent residence which he had to declare up to 31st May 1959. Advance of travelling allowance will also be allowed.

New Compensatory Allowance

The Government of West Pakistan has granted compensatory allowance and other concessions to officials posted to unattractive areas of the Kalat division, Quetta division (excepting Quetta town) and the tribal areas of former NWFP and the Punjab. The rates permissible in the Kalat divissión will be 40 per cent of the pay, subject to a maximum of Rs. 100 for non-gazetted officials, Rs. 200 for Class II gazetted officers and Rs. 300 for Class I gazetted officers. In the Quetta division and the tribal areas of the former Punjab and NWFP, however, the rates will be 20 % subject to a maximum of Rs. 75 for non-gazetted staff, Rs. 125 for Class II gazetted officers and Rs. 200 for Class I gazetted officers. Government servants posted to these areas will also be entitled to casual leave for one month with permission to take 20 days in one spell.

Concessions to Pensioners

In keeping with the recommendation of the Pakistan Pay Commission the various integrating provinces had issued orders doing away with the distinction between the pension rules applicable to superior and inferior government servants. The former Bahawalpur state government had not taken any such action. The provincial government has now decided that inferior government servants of the former state who retire on or after 30th November 1957 should be eligible for the usual pensionary benefits.

As a result of communal disturbances in the sub-continent preceding independence, Muslim employees of the former princely states and provinces now forming part of India had to migrate to Pakistan. In order to safeguard the interest of such persons, the West Pakistan Government has decided to count their previous service for purposes of pension if: (*a*) their service had been terminated after 3rd June 1947; (*b*) they had been appointed in one of the

integrating units in West Pakistan before 1st January 1951; (*c*) the previous service rendered by them had been pensionable; (*d*) they had not superannuated at the age of 55 years at the time of their first appointment in West Pakistan; and (*e*) their service in West Pakistan had been continuous from the date of first appointment to their attaining the age of 55 years. This huge financial liability has been accepted by the government in the larger interests of Muslim migrants to Pakistan.

There were no pension rules for employees of the former Baluchistan States Union. After integration they had been persistently demanding pensionary benefits as admissable to employees of the other integrating units. In order to bring these employees in line with the rest of the government servants it has been decided that they should also be entitled to elect the new pension rules and retirement benefits in lieu of the contributory provident fund benefits. This decision has been given effect from 14th October 1955. Under these orders such employees of other integrating provinces and states would also be entitled to pensionary benefits.

WATER AND POWER DEVELOPMENT AUTHORITY

The Water and Power Development Authority, a semi-autonomous organisation of the West Pakistan Government, has been entrusted with the task of planning the development and proper utilisation of the water and power resources of the province on a unified and multipurpose basis. Its main responsibilities at present are: the investigation and construction of dams, barrages and link canals; the generation, transmission and distribution of electricity; fighting the menace of waterlogging and salinity; and organising and operating a pool of heavy earth-moving machinery.

Rupees 400-Million Budget

Popularly known as WAPDA, the authority is the biggest organisation of its type in the country. It was set up a little over a year ago, and already its annual budget has reached the region of Rs. 400 million. This figure represents almost half of the provincial government's 1959-60 budget. It also includes some allocations from the central government for projects being handled on their behalf. Since the beginning of 1959, WAPDA has also obtained from the Development Loan Fund of the United States Government three loans totalling 52 million dollars. More loan applications for new projects have already been submitted by it. The authority's budget and responsibilities are expected to grow tremendously when it takes up the water replacement works under the proposed treaty to settle the water dispute with India.

Transfer of Projects

WAPDA's activities gained momentum in October 1958 when the Rs. 370-million Gudu Barrage Project, in the preliminary stage of construction, was transferred to it. During the same month, the Rs. 39-million Gujranwala Hydel Project, also in preliminary stage, and the Rs. 44-million Hyderabad Power Station and Thermal Grid scheme, in blue-print stage, were also placed under its charge. Since then a number of other projects, including the construction of the gigantic Rs. 1,400-million Mangla Dam on the Jhelum river, the sinking of over 2,000 tube-wells to check waterlogging and salinity in the Rechna and Chaj *doabs*, the construction of the 140,000-kilowatt capacity Multan Thermal Power Station based on Sui gas and the installation of the primary and secondary electricity grids, have been handed over to WAPDA. On 1st April 1959, the West Pakistan

Government placed its Electricity Department under the charge of the authority. WAPDA has undertaken to give the government a 4 % return on the value of the assets of the department estimated at Rs. 420 million.

Mangla Dam

WAPDA's biggest undertaking—also the biggest in Pakistan—is the construction of the Mangla Dam on the Jhelum, about 2 miles upstream from the headworks of the Upper Jhelum Canal. Costing about Rs. 1,400 million, this project will take some ten years to complete. The lake behind the dam is expected to cover an area of 100 square miles with a storage capacity of about 4·75 million acre-feet. Water from this reservoir used through the Jhelum and Chenab canal systems will help to irrigate 3 million acres of new and reclaimed land—an increase of about 10 % in the total irrigated land in West Pakistan. The project includes a power house with an installed capacity of 300,000 kilowatts.

The dam has been designed to make the maximum use of the materials available close to the site. An idea of the size of the structure may be had from the quantities of earthwork required for the dam: about 13 million cubic yards of fill for the impervious core, and about 40 million cubic yards as filter and outer zones of the dam. The dam is an embankment type, and in addition to the huge capacity of the permanent spillway which can take care of an unregulated floods of about one million cusecs and a half in the Jhelum, provision has been made for spilling large quantities of water over the southern rim of the reservoir in case of emergencies. The Mangla lake is also to be developed as a fishing centre and as a health and tourist resort.

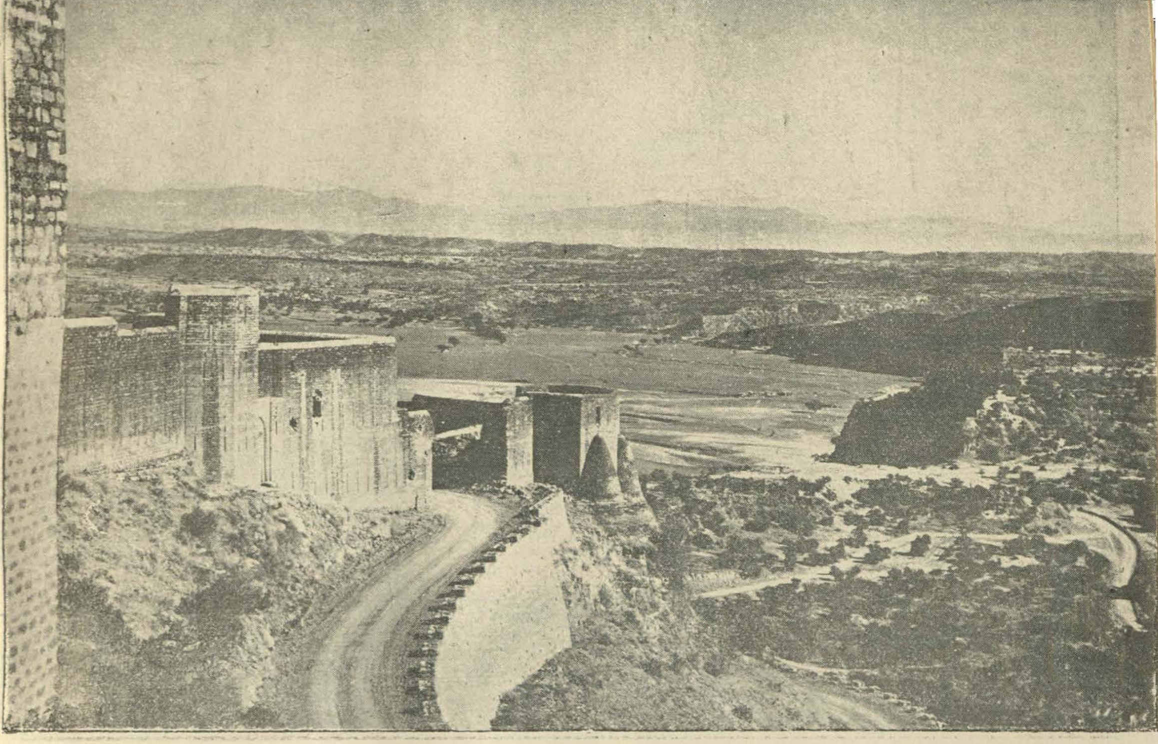
Tarbela and Kalangi Dams

WAPDA has also started investigation of dam sites on the Indus river. Among these is the site at Tarbela, about 30 miles upstream from Attock. Preliminary estimates for this dam show that it will cost Rs. 1,200 million and can have a storage capacity of 4·2 million acre-feet which can provide irrigation to an additional 2 million acres of land. It will also have the potential capacity of producing about 600,000 kilowatts. The Tarbela dam will take 9 years to complete.

Another multipurpose project now being considered by WAPDA engineers is the construction of a dam at Kalangi on the Swat river. It will be built if found feasible and economical. The preliminary estimate is that this project can provide irrigation for an additional area of about 2 million acres and produce about 500,000 kilowatts of hydel power.

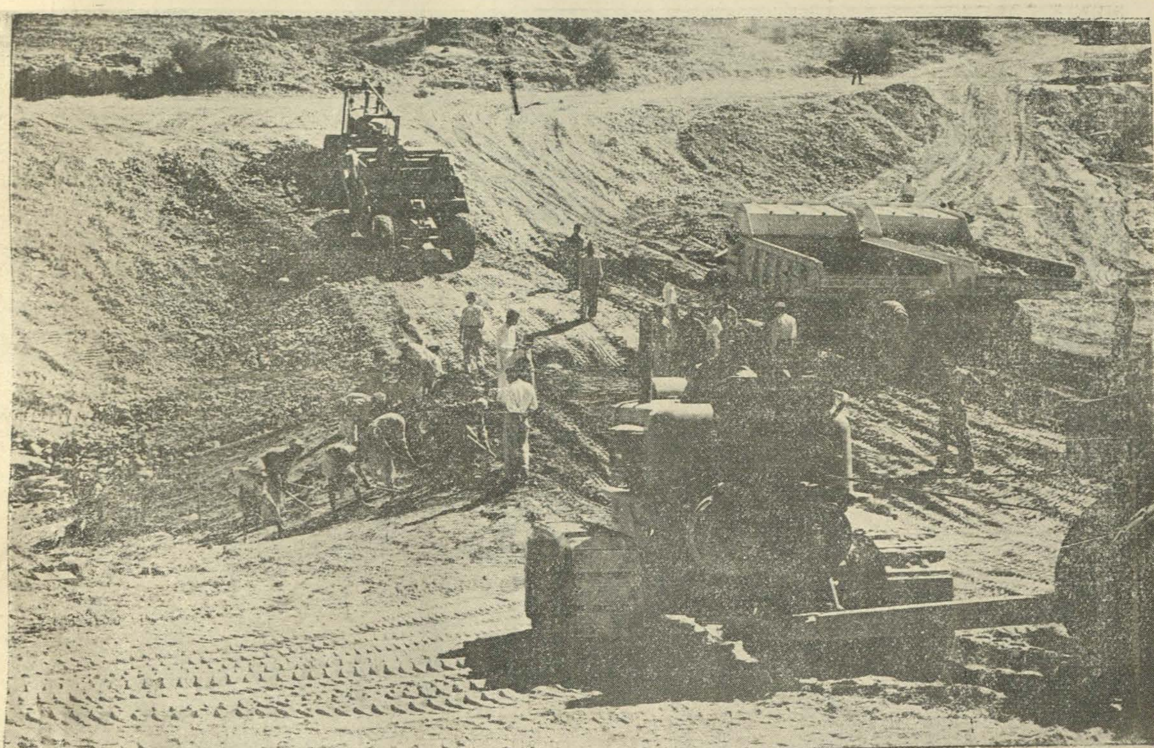
Link Canals

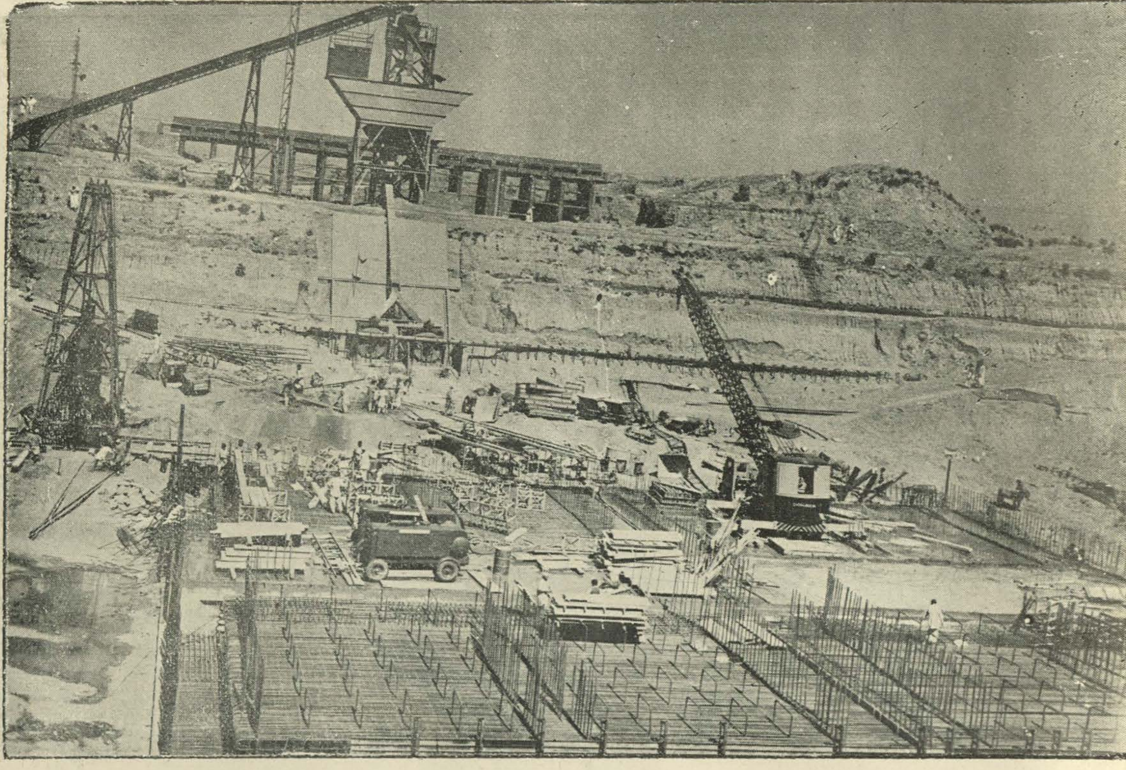
The authority is moving into position to undertake, without loss of time, the construction of more storages and link



This is the spot near which the huge Mangla Dam will be built on the River Jhelum. On the left is the Mangla Fort

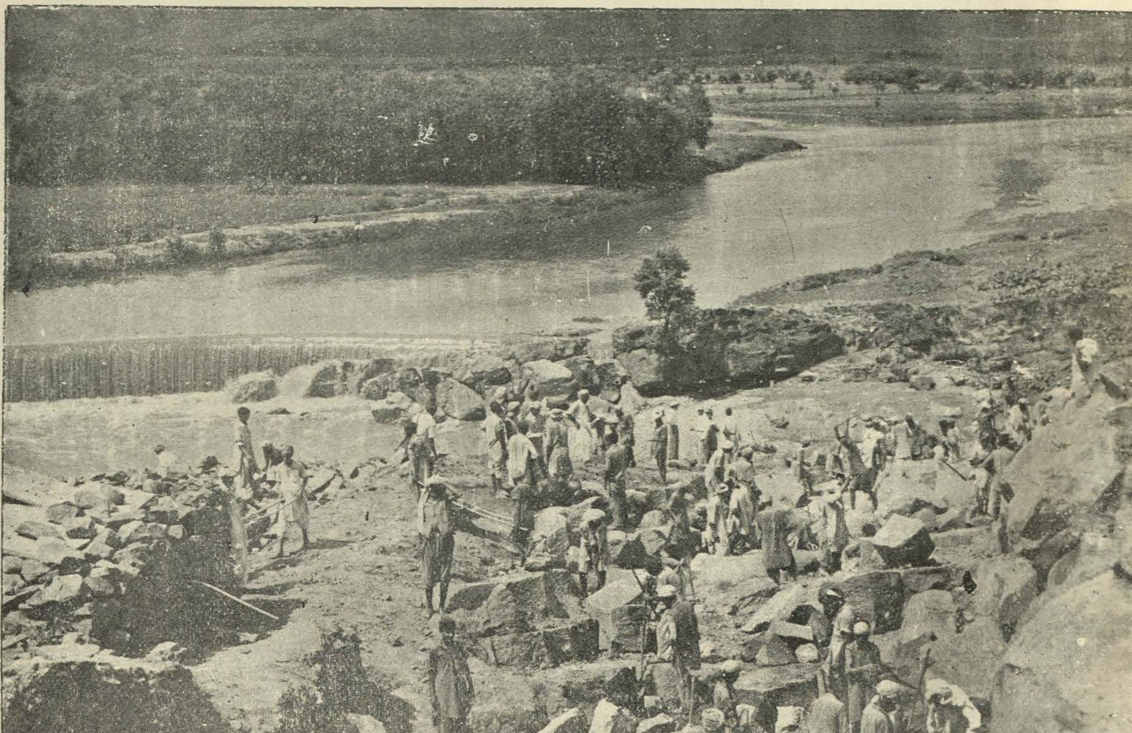
Heavy machinery is being extensively used to build the Mangla Dam





The Shadiwal Hydel Project will generate 13,200 kilowatts of electric power

The Rawal dam is being constructed near the area chosen for the new federal capital. It will supply water for both drinking and irrigation purposes



canals that will have to be built in West Pakistan under the World Bank's plan for the settlement of the Indo-Pakistan canal water dispute. Details of this programme, which has to be carried out by WAPDA and the Irrigation Department, will be known after an agreement has been finally reached and an international treaty signed.

Development of Arid Zones

The development of arid zones in West Pakistan is also being given high priority. Nearly 20 schemes are being investigated for various areas, mostly those flanking the Indus river in the Frontier Regions and those bordering the perennial streams that flow through the districts of Peshawar, Kohat, Hazara, Campbellpur, Rawalpindi; Jhelum, Mianwali and Bannu.

Among these schemes is a small multipurpose project for the construction of a dam at Gul Katch in the Dera Ismail Khan district. Preliminary work on this project has been done by the Irrigation Department, but it is now being transferred to WAPDA. This dam will harness the Gomal river in a reservoir with a storage capacity of half a million acre feet. It is designed to provide irrigation to about 100,000 acres, produce about 7,400 kilowatts of hydel power and also moderate floods in that area.

Another scheme is for the construction of a dam in the Kohat area near Tanda. This will provide irrigation to about 65,000 acres of barren land in the Kohat district.

Under the lift irrigation scheme pumps run on electricity will use the perennial streams like Sirhan and Dor (Hazara district), Kalpani (Mardan district), Haro, Nandna and Bahudra (Campbellpur district), Leh Nullah and Soan (Rawalpindi district), and Kanshi (Jhelum district), Toi (Kohat district) and Kurram (Bannu district). Some areas in Peshawar which can be fed from the Kabul river and in the Mianwali district near the Indus river, will also be covered by this scheme which will bring about 22,000 acres of land under cultivation. About 100 pumps will be required for the purpose.

This year WAPDA is also to make a beginning in the Las Bela district. It is undertaking a comprehensive hydrological and land classification survey for the optimum development of the Porali Basin in this region. The Darwat Dam in the Sind area and Bund Murad Khan Project near Karachi are being taken in hand.

Rawal Dam

WAPDA has also started work on a small dam near Rawalpindi to be known as the Rawal Dam, situated in the heart of the new federal capital area. This is an entirely Pakistani project, designed by Pakistani consulting engineers, being built without the help of foreign experts and without any expenditure of foreign exchange.

The Rawal Dam, which is estimated to cost about Rs. 6·3 million will be built on the Kurang river. The dam will be 80 feet high and will be ready by June 1960 forming a crystal clear lake with a surface area of approximately three square miles. The lake has been designed to hold about 50,000 acre-feet of water which will provide irrigation to about 8,000 acres of land and will also make available 16 million gallons a day for the water supply requirements of the new federal capital and Rawalpindi town.

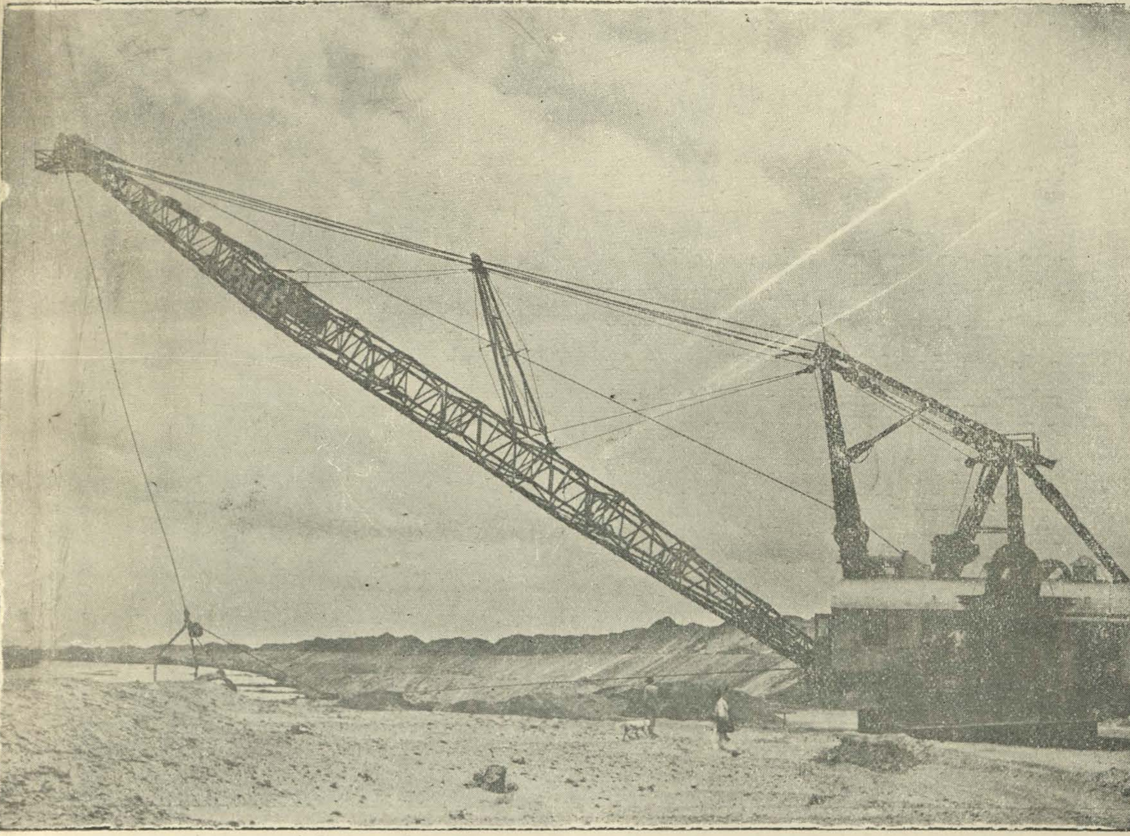
Gudu Barrage

The most important irrigation project now under way in West Pakistan—the Gudu Barrage on the Indus—is also a WAPDA responsibility. The barrage is located 10 miles east of Kashmore and about 64 miles downstream from the confluence of the Sutlej and the Indus. When completed, it will provide weir-controlled irrigation through its three main feeder canals for 2·5 million acres of culturable land in the regions of Sukkur, Ubauro, Mirpur Mathelo, Gotki, Panoakil and Rohri, now dependent upon river inundation. It will also bring under cultivation 387,000 acres of virgin land in the *talukas* of Jacobabad, Kashmore, Thul, Garhi Khairo, Shahdadkot, Shikarpur, Garhi Yasin and the Nasirabad area of former Baluchistan. At a later stage, another 250,000 acres of land in the former Baluchistan area are expected to be provided lift irrigation with pumps drawing water from the Pat feeder.

Salinity Control

WAPDA is giving high priority to its salinity control and reclamation project. Under this project, over 2,000 tube-wells are to be sunk, mostly in the area lying between the Ravi and the Chenab, within the next two years. This will result in the reclamation of about 1·4 million acres of land affected by *sem* and *thur* in the Rechna and Chaj *doabs*. The target, at present, is the Shahkot area spread over the Lyallpur and Sheikhupura districts, in which over 400 tube-wells are to be sunk. By the end of the year, WAPDA engineers and contractors will have spread these activities over most of the project area.

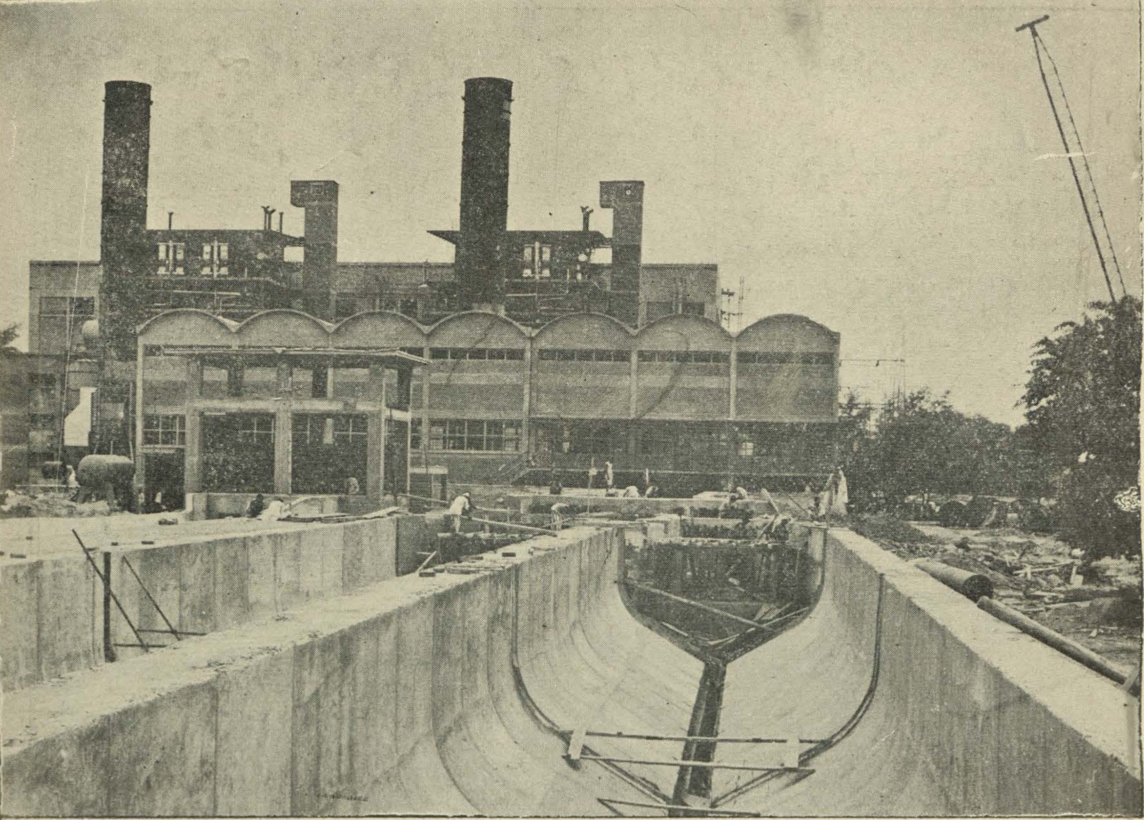
WAPDA's 2,000 tube-wells, it is estimated, will increase by about 200 % the present irrigation supplies of 3,500 cusecs of the canal water for the project area which covers Shahkot, Shadman, Jaranwala, Chuharkana, Sangla Hill, Khanqah Dogran, Harse Sheikh, Pindi Bhatian, Chichoki Mallian, Zafarwal, Beranwala, Hafizabad and Lalian. This additional water will flush the destructive salts out of the root zones and thus make the land fit again for normal cultivation. It is estimated that in the third year of the project's operation the production of foodgrains should increase by 700,000 tons, and during the fifth year of its operation by 800,000 tons. This will be the result of the first phase of the programme which is to be extended to all areas affected by waterlogging and salinity.



A giant dragline at work on the Gudu Barrage now under construction on the River Indus

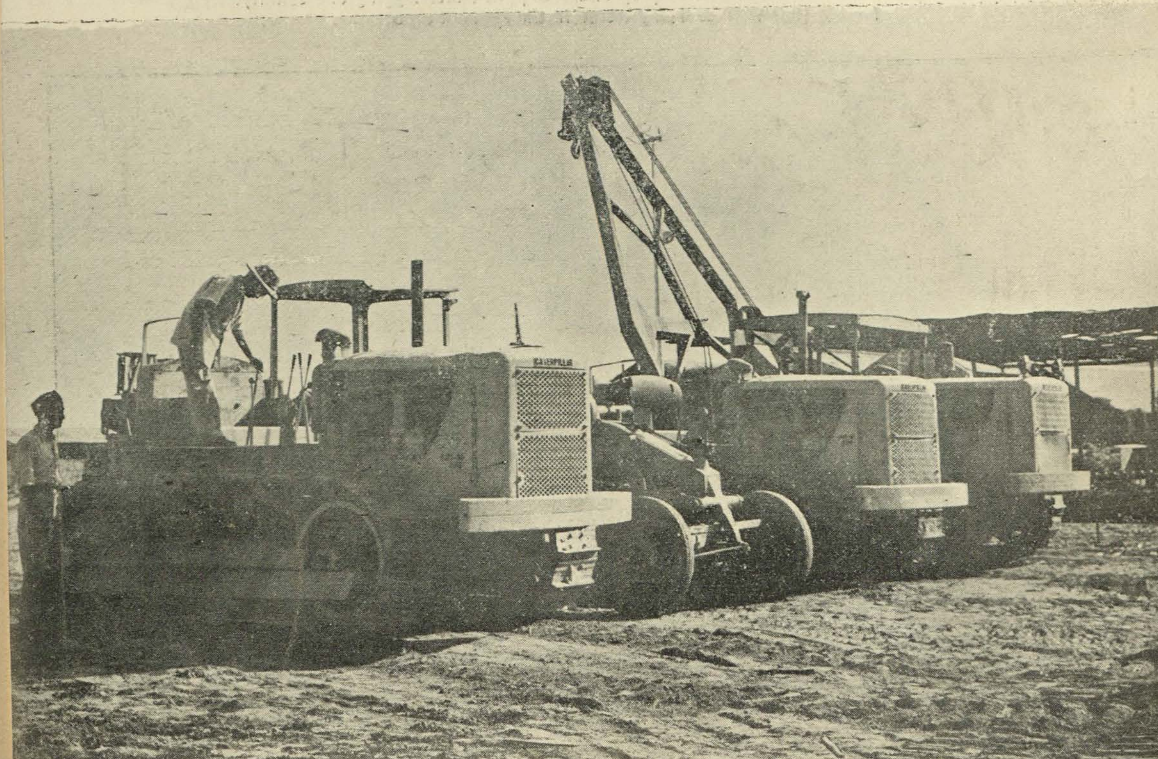
WAPDA is undertaking an ambitious programme to fight water-logging and salinity. Here a tube-well is being tested in the Shahkot area





The thermal power station at Multan which will be ready by the end of the year

Caterpillars at one of the WAPDA projects. A machinery pool organisation has been set up to coordinate the use of heavy machines



Primary Grid

Linked with the salinity control and soil reclamation project is the construction of the High Tension Grid, also known as the Primary Grid, which will carry electricity to these tube-wells through the Secondary Transmission and Distribution Grid. The primary grid is estimated to cost about Rs. 190 million. A loan of 15·2 million dollars to cover some of the foreign exchange expenditure is one of the three already obtained from the Development Loan Fund. Orders have been placed with an Italian firm for the completion of the grid by the end of 1960.

The primary grid will extend over 750 miles and will connect the Warsak and Multan power stations with the existing West Pakistan Grid which links up the power stations at Malakand, Dargai, Rasul, Daudkhel, Shahdara, Chichoki Mallian, Lyallpur and Montgomery. The primary grid will also allow for further inter-connections with other hydel stations that may be built ni West Pakistan. Most of it will be completed by the end of next year.

The high tension grid has been designed to deliver power in bulk at 10 load centres to be located at Multan, Lyallpur, Sargodha, Daudkhel, Peshawar, Wah, Kharian, Montgomery, Rawalpindi and Lahore.

Secondary Transmission Grid

Of the Development Loan Fund loans to WAPDA, about 32 million dollars have been advanced for the foreign exchange component of the Secondary Transmission and Distribution Grid Project. This grid will have 4,000 miles of transmission lines of various capacities, and its 25 new distribution centres will take power from the 10 main load centres of the primary grid to the ultimate consumers. It will also provide the basic structure for West Pakistan's future agricultural and industrial development, electrification of rural areas, development of arid zones and the electrification of the main railway line and other branch lines between Peshawar and Karachi. The major portion of the secondary grid is expected to be completed by 1961.

In the southern zone, WAPDA is installing grid systems based on the new power houses at Hyderabad and Sukkur. Both of these will be thermal stations working on natural gas from Sui. The Hyderabad scheme, formerly known as the Lower Sind Thermal Power Station and Grid Scheme, is being financed entirely out of Pakistan's own resources. The power house and grid being built under this project will cost Rs. 44 million and will have an installed capacity of 20,000 kilowatts, later to be increased to 30,000 kilowatts. Also at a later stage the grid system powered by Hyderabad will be linked with the Sukkur Thermal Grid. The Sukkur project is being financed by the Canadian Government which is also building the Warsak and Shadiwal

projects. Ultimately, the Sukkur-Hyderabad grids will be linked with the secondary grid covering the northern and central zones of the province.

For the Quetta region, WAPDA has planned a thermal station using indigenous coal. Work on this will start as soon as funds are available. Its cost is estimated at Rs. 30 million and its capacity at 15,000 kilowatts.

The two main contributors of power to the primary grid will be the Multan and Warsak stations. They will add about three times the load (just over 125,000 kilowatts) at present available on the West Pakistan grid. By January next year, Warsak's first turbine will come into commission, to be followed by the other three turbines at intervals of three months. Each turbine is of 40,000 kilowatts capacity which means that by the end of next year Warsak will have a total capacity of 160,000 kilowatts. On completion the project will be handed over to WAPDA for operation.

The Multan Natural Gas Thermal Power Station, which is also a WAPDA project, is expected to come into operation earlier than Warsak. By November this year it will be producing about half of its total generating capacity of 140,000 kilowatts. WAPDA has decided to increase the Multan Power Station's capacity to 270,000 kilowatts.

Of the canal falls hydel project, the Rs. 27-million Chichoki Mallian power house has recently been completed, adding about 13,000 kilowatts to the West Pakistan power grid. Among other hydel projects expected to come into operation in the near future are the Gujranwala and the Shadiwal projects, with a capacity of about 12,000 and 13,200 kilowatts respectively.

All this extra power will not be sufficient to meet the growing demand after about five years. Even today the suppressed demand is almost equal to the demand that is being met by the West Pakistan grid. It has been estimated that by the end of 1960 the maximum demand will be about 285,000 kilowatts, and by 1970 it will have increased to over 700,000 kilowatts. Even this estimate may have to be revised upwards in view of the anticipated demand for increased power supplies both in the industrial centres and in thev illages. WAPDA plans to electrify every village in West Pakistan.

To meet the growing demand for power WAPDA is already planning the Kunhar Hydel Project to fill the gap between the completion of the Multan and Warsak stations and the coming into operation of the 300,000-kilowatt hydel station at Mangla in 1968. In the first phase the Kunhar Valley Project will have a power station at Paras with a capacity of 180,000 kilowatts. Later, this capacity can be doubled.

Rural Electrification

WAPDA is making a modest start this year in its plan for rural electri-

fication. By June next year, it plans to electrify 200 villages in the central zone and 100 in the northern zone.

Machinery Pool Organisation

The Machinery Pool Organisation has been set up under WAPDA's operational control to centralise and co-ordinate the use of various types of earth-moving machinery required in the construction of various multi-purpose and irrigation projects. Most of this machinery is owned by WAPDA and the Irrigation Department. The organisation has already set up four machinery repair workshops at Lyallpur, Kashmore, Sukkur and Jamshoro. These workshops will be equipped to undertake major repairs to all kinds of earth-moving machinery such as tractors, bulldozers and draglines. Some of the spares needed for the machines will also be manufactured in these workshops at a later stage.

With the help of American contractors the Machinery Pool Organisation is making an inventory of the various types of machinery available in the province. It will keep this machinery in running condition and loan it out for use on projects being executed by WAPDA, the Irrigation Department or other agencies of the government. The value of the earth-moving machinery in West Pakistan is estimated to run into several millions of rupees. With centralised control to prevent duplication in orders and with repair facilities, the organisation is expected to save a considerable amount of foreign exchange.

IRRIGATION

West Pakistan possesses one of the finest and largest networks of irrigation canals in the world. Based on the Sutlej, Ravi, Chenab, Jhelum and Indus from which take off more than a score of large canals, splitting up into numerous branch canals and hundreds of minors and distributaries, it covers a substantial part of the plain known as the Indus Basin. The area irrigated by this eleborate system justifies the statement that these canals are the life-blood of the province and the source of its agricultural prosperity and industrial progress. After independence, however, a shortage of water was felt at times in the rivers and canals emanating from the Indian territory due to increased withdrawals by India, which led to a dispute between the two countries. It is now being resolved through the good offices of the World Bank.

One of the strongest arguments in favour of integration was that all the component parts of the geographically compact western wing of Pakistan were dependent for their economy on common rivers and the irrigation system based on them, and that only a utilization of these resources with an eye on rational, unified and homogeneous development of all the regions, irrespective of the considerations of provinces and states, could bring about the rapid national advance visulised in the concept of Pakistan. The approach to irrigation development acquired a wider and less parochial outlook on integration, and the former inter-provincial water disputes gave way to a healthier and more rational attitude: the progress in the comparatively advanced areas was maintained and at the same time the tempo of activity in the less developed areas was intensified. This assertion will be borne out by the present picture of projects in the province.

Functions

The Irrigation Department is not merely an agency maintaining and running canals, drawing water from rivers and distributing it for irrigation through canals; it also undertakes the construction, repair and maintenance of headworks, dams, reserviors, barrages, canals, etc. Counteracting salinity, waterlogging and surface drainage, controlling floods and installing and operating tube-wells are also its charge. The department carries out research in hydraulics and field engineering and has one of the finest research institutes in the East. It is also responsible for the assessment and collection of water-rates in the former Punjab NWFP and Bahawalpur.

The following pages present a picture of the department's present activities; main projects have been spotlighted while progress in the routine functions has received due mention. Some of the projects which were previously with the department have been taken over for implementation by the Water and Power Development Authority. (See the relevant chapter.)

Taunsa Barrage

This project which is estimated to cost Rs. 207·1 million consists of a barrage-*cum*-road-and-railway bridge across the Indus and two canals. Taking off on the left side is the Muzaffargarh canal, having a capacity of 7,400 cusecs, which has already been completed. Water started flowing in it on 3rd March 1959 when the President performed the opening ceremony of the barrage on which work was started in early 1953. The other canal, the Dera Ghazi Khan canal, which will off-take on the right side of the barrage and will have a capacity of 7,700 cusecs, is now under construction. About 50 % of the work has been completed, and on the remaining portion it is proceeding apace.

When completed in all respects, the project will provide water supply for the irrigation of an additional area of 156,000 acres: 100,000 on the Muzaffargarh canal and 56,000 on the Dera Ghazi Khan canal. Water to the old areas which received precarious supplies through inundation before the construction of the barrage will now be assured. Not only this. Through weir-controlled supplies, *rabi* crops can be saved from failure during years of drought by enforcing rotational turns on the canal system which was not possible in the pre-barrage period. Assured supplies will prove an incentive for the cultivator to develop the area.

Ghulam Muhammad Barrage

In September 1958, the fourth and the last of the main canals which takes off on the right of the Ghulam Muhammad Barrage was completed and opened. The other three canals, all on the left bank, had been completed in 1956-57, while the barrage itself was inaugurated in March 1955.

On assumption of office, the new government showed its keenness on the rapid execution of the project, and as a result it has been decided to complete it in 1962-63, two years ahead of the original schedule. Also, colonization operations have been intensified.

These works aim at irrigating a total area of 2,750,000 acres in the lower Sind area, out of which 1,175,000 acres were commanded by the inundation system and, therefore, received irregular supplies. That means that when fully developed the project will provide water for an additional area of 1,575,000 acres of land, apart from assuring supplies to the existing areas. The total estimated expenditure on the whole project is Rs. 350 million.

During the year, 1958-59 irrigation facilities were extended to a total of

about 360,000 acres of *nakabuli* area consequent on the excavation of the channels. Work on the remaining channels is in progress, and all the available resources are being utilised to complete them expeditiously.

Kurramgarhi Irrigation Scheme

Started in 1949, this multipurpose project is expected to be completed in 1960 at a cost of Rs. 68·4 million, Its main features are a diversion weir on the Kurram river; a lined main canal with a capacity of 3,800 cusecs; two 60 feet hydel power stations on Katch Kot feeder canal for generating 2,000 kilowatts each; and a dam for storage purposes.

The scheme will irrigate new areas totalling 150,000 acres; besides, it will assure supplies to 127,000 acres of the already commanded area. The old areas depend for their supplies on a temporary diversion bund which has failed frequently, resulting in failure of crops. The diversion will ensure regular uninterrupted supplies. The generation of hydel power is helping to extend tube-well irrigation in the Dera Ismail Khan and Bannu districts.

The dam which is being constructed on the Baran nullah will conserve the monsoon supplies of the Kurram river. These supplies of some 84,000 acre-feet which today go waste will be utilised in the right bank canal when needed. The Baran dam—3,475 feet long and 120 feet high—involves an earth work of 96 million cubic feet.

But for the dam, the Kurramgarhi scheme is about 80 per cent complete. A difficulty is being experienced in the excavation of the dam on account of the failure of a foregin firm to put in an inlet tower, values, etc., and it is feared that it might not be constructed on schedule, i. e. end of March 1960. The firm has, however, been approached to honour its commitments.

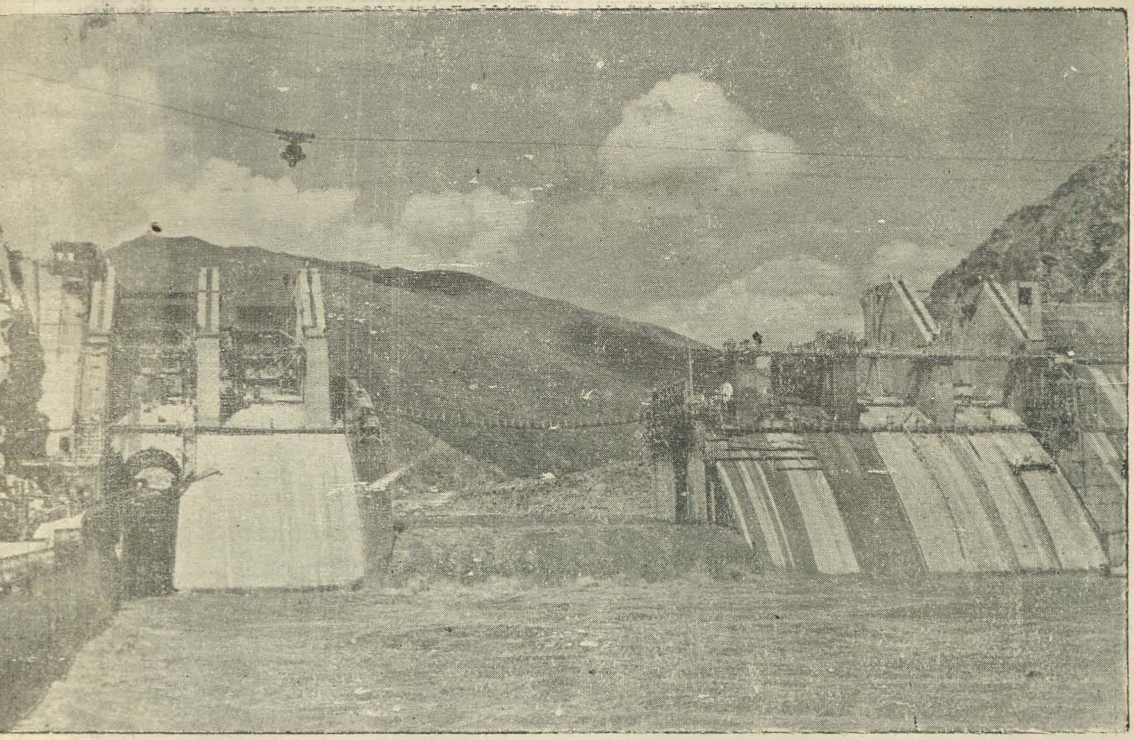
Warsak High-Level Canals

This project involving an expenditure of Rs. 22·75 million will irrigate 120,000 acres by the construction of high-level canals off-taking both on the right and left of the Warsak dam. The right bank canal bifurcates into flow and lift channels which will have a capacity of 255 and 200 cusecs and irrigate some 62,000 and 47,000 acres respectively. Similarly, the canal off-taking on the left will supply water for irrigating 11,000 acres. It is a small canal having a capacity of 45 cusecs only.

The execution of the Warsak high-level canal project began in 1957 and will be over by 1961. Half of the work has already been finished.

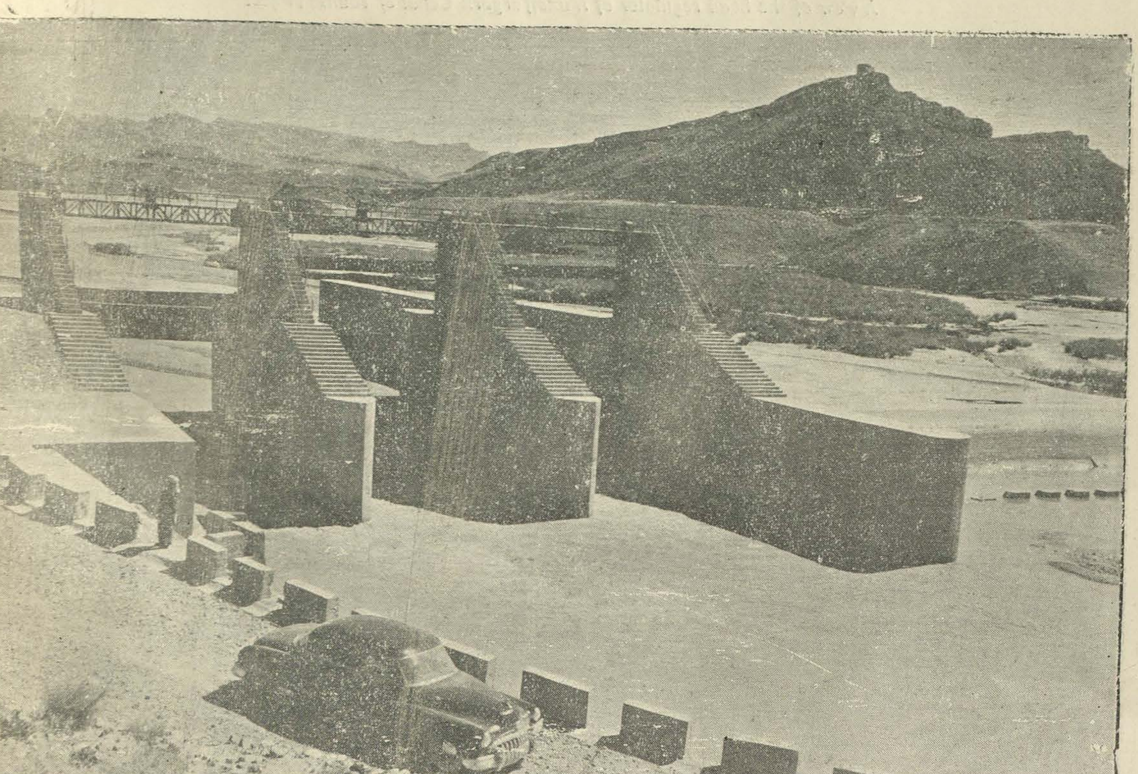
The Link Canals

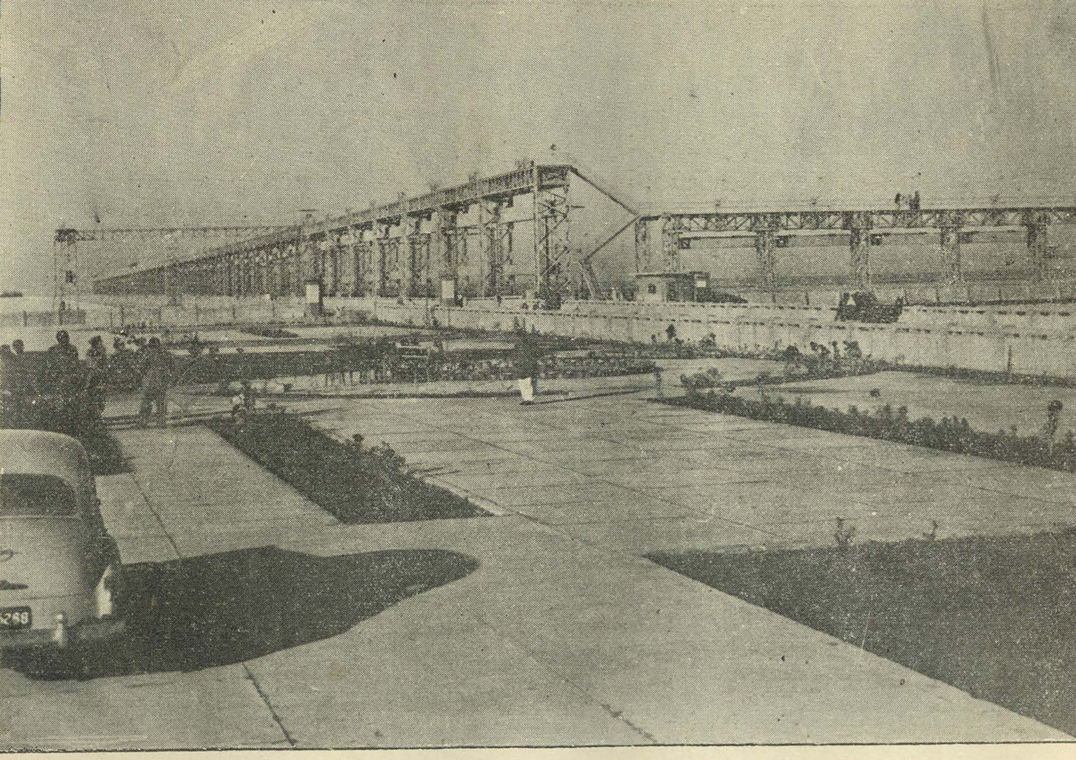
The *kharif* of 1959 saw for the first time the three links running practically to their full designed capacities. These links the Balloki-Sulemanki, the Bambanwala-Ravi Bedian-Dipalpur and the Marala-Ravi, have been constructed to offset the shortage of water experienced during *kharif* on the Sutlej



The Warsak dam on River Kabul under construction 18 miles from Peshawar. It will help to irrigate vast areas in the tribal territory

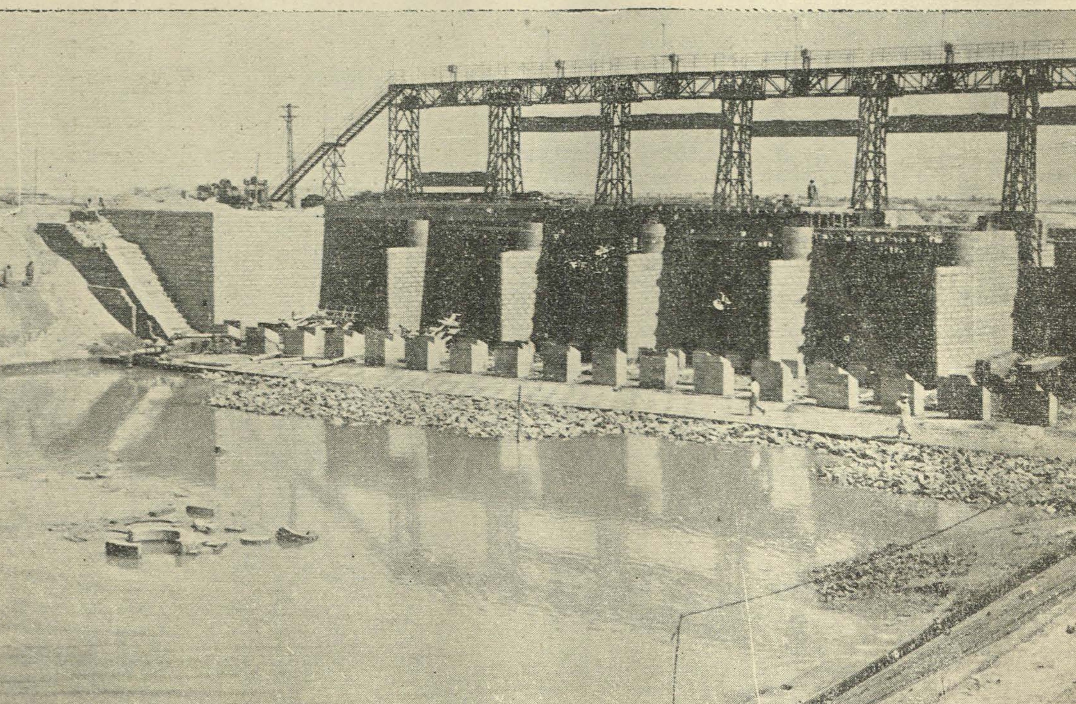
The Kurramgarhi weir near Bannu has been completed





A view of the newly-completed Taunsa Barrage on the River Indus. This will help to irrigate 1·4 million acres

A view of the head regulator of Muzaffargarh Canal of Taunsa Project



Valley Project canals as a consequence of Indian action.

Sidhnai Spill Channel

The construction of the spill channel which is 90 % over was primarily undertaken to relieve the Sidhnai headworks of the pressure of heavy discharge of water during floods. Before being re-modelled the headworks could not take more than 60,000 cusecs. The capacity now has been raised to 100,000. However, of late the discharge has been touching the figure of 150,000 during the floods. The by-pass channel is, therefore, being taken off about eight miles upstream of the weir. Alongside affording the much-needed relief to the head works, the spill channel will save inundation of large areas in the Multan district. The scheme, when completed by March 1960, will have cost Rs. 21·7 million. It was started in 1956.

Nari Bolan Scheme

Prepared in 1954 and executed for the most part by the Central Engineering Authority, the Nari Bolan Project was handed over to the West Pakistan Irrigation Department last December. This modest scheme will cost Rs. 3 million, irrigate a new area of 24,000 acres and ensure regular supplies to an existing area of 10,000 acres. It will consists of an earthen dam (1,650 feet long and 63 feet high) for storing 73,000 acre-feet of supplies of the Bolan river; a channel of 220 cusecs capacity for feeding the canal system and for draining monsoon supplies in excess of the storage capacity; and an inlet tower and a tunnel for regulating supplies.

Nara Canal Project

The former Sind Government had allotted 180,000 acres of land lying barren and uncommanded on both sides of the Nara Canal to the Military Families Resettlement Organisation for rehabilitating the families of *ex*-servicemen. Levelling operations were to be done by the MFRO and irrigation facilities were to be arranged by the department. Accordingly, it undertook the construction of six channels at an estimated cost of Rs. 1,487,000. Two channels, Smathri Minor (Rs. 281,000) and Sadrat Minor (Rs. 171,000), and six miles of Sadrat Minor II (Rs. 645,000) have been completed already. Work on other projects—Feeder *ex*-Sadrat Minor (Rs. 249,000), Lib Minor (Rs. 51,000) and Sinhoree Minor (Rs. 90,000)—is in progress.

Development of Quetta Area

True to the principle of greater attention towards less-developed areas, the Irrigation Department has stationed a large staff—a Deputy Chief Engineer, two Superintending Engineers, seven Executive Engineer, and 20 Sub-Divisional Officers—in the Quetta region for exploitation of resources for irrigational purposes. Ten schemes relating to coastal tributaries and the

desert stream region have been finalised under the grow-more-food campaign and are expected to be implemented by 1st July 1960. When fully developed the projects will irrigate over 60,000 aeras. Important among them are tube-well installation in the Uthal, Hub and Yaru areas and remodelling of the Dhadar channel. In 1960 they will irrigate 10,500 acres and on full exploitation 42,000 acres.

The department has under consideration a large number of schemes involving an estimated cost of Rs. 525 million for execution in the Quetta region during the Second Five-Year Plan period. These schemes concern a wide range of subjects: drainage, flood regulation, extension of irrigation facilities, loan to the Reclamation Board, tube-wells, survey and investigation.

Concessions to Cultivators

Under the grow-more food campaign a number of irrigation facilities and concessions have been sanctioned for the cultivators. Inter-cropping of foodgrains in gardens and orchards has been allowed. Where irrigation facilities do not already exist supplies can be lifted for drains, *nullahs* and escapes. Non-perennial channels which normally close on specified dates are allowed to run for such additional period as is feasible. Closure of canals necessitated by floods or some other reasons is done for the minimum possible period. Water is supplied during *kharif* on a 2½-month basis to fallow lands within the irrigation boundary, which have not already been sanctioned canal supplies. These supplies may be extended for a further period provided water is available. In addition, excess supply, when available, is given to a maximum of 25 % of the normal capacity of canals. All culturable lands attached to government offices, bunglows and rest houses are utilised for producing food crops during *rabi*.

Mechanical Directorate

This engineering organisation of the Irrigation Department is a specialised agency which controls the entire mechanical planning and execution in the province, wherever it exists in circles and divisions. It maintains a complete record of all plant and machinery deployed on works or under repairs. Thus, by having a centralised control of all the equipment, the mechanical units are utilised to the best advantage. The major items of machinery are 770 units of transport vehicles. 840 units of earth-moving machinery (excavators, bulldozers, scrapers, etc.) and 2,270 units of pumping plant and equipment of various capacities.

To keep all this equipment in perfect working order, it is essential to have efficient repair workshops located at key points in the province. There are four such workshops at Lyallpur, Lahore, Jamshoro and Sukkur. Most of the machinery, which is in constant use and generally runs into 3 shifts a day, has to be fed with readily available spare parts. In view of

import difficulties, stores units are maintained which forecast demands and requirements and keep essential stocks of spares at all times so that their non-availability in the local market does not render the departmental equipment idle. It was because of this momentous task that the Irrigation Department joined hands with WAPDA in creating a machinery pool organisation to utilise and deploy equipment consistent with the specific requirements of important projects.

Land Reclamation

The fact that nearly one-third of the total irrigated area of 22 million acres in the province is, totally or partially, affected by salinity and waterlogging gives an indication of the stupendous nature of the problem. This is not all. The damaged area is increasing at a menacing rate of more than 100,000 acres annually. Needless to say that the economy of the province, which is overwhelmingly agricultural, has suffered a grave setback resulting in a variety of intricate problems: low yield, shortage of foodgrains, depletion of foreign exchange resources because of large imports of foodgrains, slowing of the pace of industrial development, and so forth.

A disadvantage is that the supply of excessive water for washing down the salts—the only known method of fighting salinity—gives rise to water-logging because the water-table comes up, and to maintain equilibrium open drains are provided alongwith tube-wells. Besides, if water-supply is not enough the salts have a tendency to return to surface. To tackle such a situation effectively so as to ensure against recrudescence, mighty efforts on a war-footing are called for. Measures directed at temporary as well as permanent reclamation have been planned. So far, 370,000 acres have been made fit for cultivation as a temporary relief measure. Out of this 25,000 acres were reclaimed last year.

For permanent reclamation and development of land and for saving the unaffected land from deterioration, it is necessary to raise the allowance of water for irrigation and to keep the sub-soil water from rising. But in view of the shortage of canal water it is not possible to provide the required supply of one cusec for 150 acres, and the minimum number of acres that are fed by one cusec is 333. To make up the deficiency, underground water is drawn by installing tube-wells in big reclamation projects which cover about 3 million acres in seriously affected tracts.

The Land Reclamation Directorate provides the scientific basis by conducting soil and water research work in its well-equipped research laboratories and experimental farms spread over the former Punjab. Reclamation methods and cropping practices developed at these institutes are applied in the field for temporary relief and in the projects for permanent reclamation. The directorate is carrying out

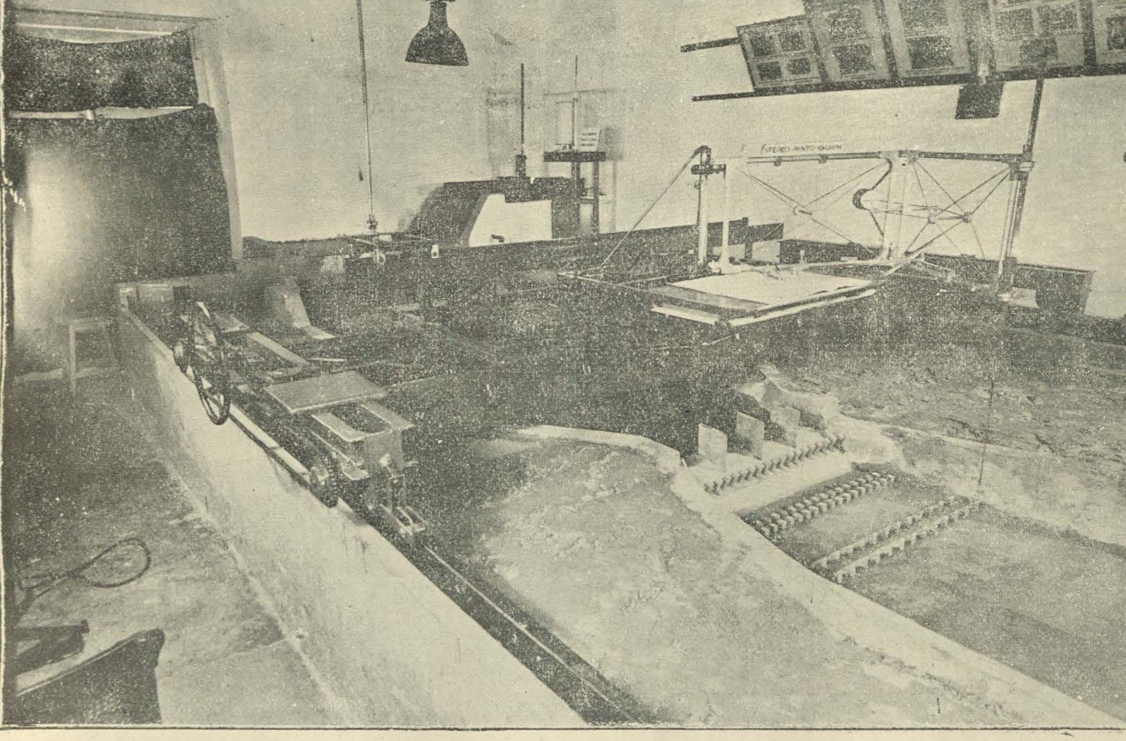
a soil and water survey of different *doabs* under the Ground-Water Development Project. This major step taken with the aid of the ICA will make for the scientific management of these resources. The data so collected will help to achieve the objective of preventing soil deterioration and utilising water and land resources. So far, 7,610,000 acres have been covered by this survey, including 3,000,000 acres covered during 1958-59.

Research

Research unquestionably constitutes the springboard for every technological and scientific advance. It is on the basis of information collected as a result research that new and more effective methods are employed to achieve greater and surer success in any field. The realisation of this fundamental truth led the government to establish an institute at Lahore some 35 years ago to deal with as important and highly technical a matter as irrigation. Since then the institute has undertaken a variety of assignments for experimentations at its laboratories of hydraulics, physics, electronics, mathematics, statistics, soil mechanics and cement testing; and rendered valuable advice on the control, utilisation and flow of water.

The design of weirs on permeable foundations perfected by the institute is a landmark in the history of irrigation research. The design and construction of hydraulic structures, especially buildings of headworks on permeable sand foundations, present many difficult problems. Barrages in this part of the country are built on sand and the water percolating under the structure causes an uplift pressure which may blow up or undermine the foundation and thus cause failure of the structure. In collaboration with field engineers the research officers of the hydraulics and physics laboratories carried out extensive experiments in this behalf and succeeded in formulating complete rules to govern the safe design of weirs on sand foundation. Many weirs have since been designed according to these principles and it can now be safely claimed that expensive failures of such weirs have become a thing of the past. The immense usefulness of the design evolved by the institute can be imagined from the fact that West Pakistan's agricultural economy depends on irrigation channels emanating from these weirs.

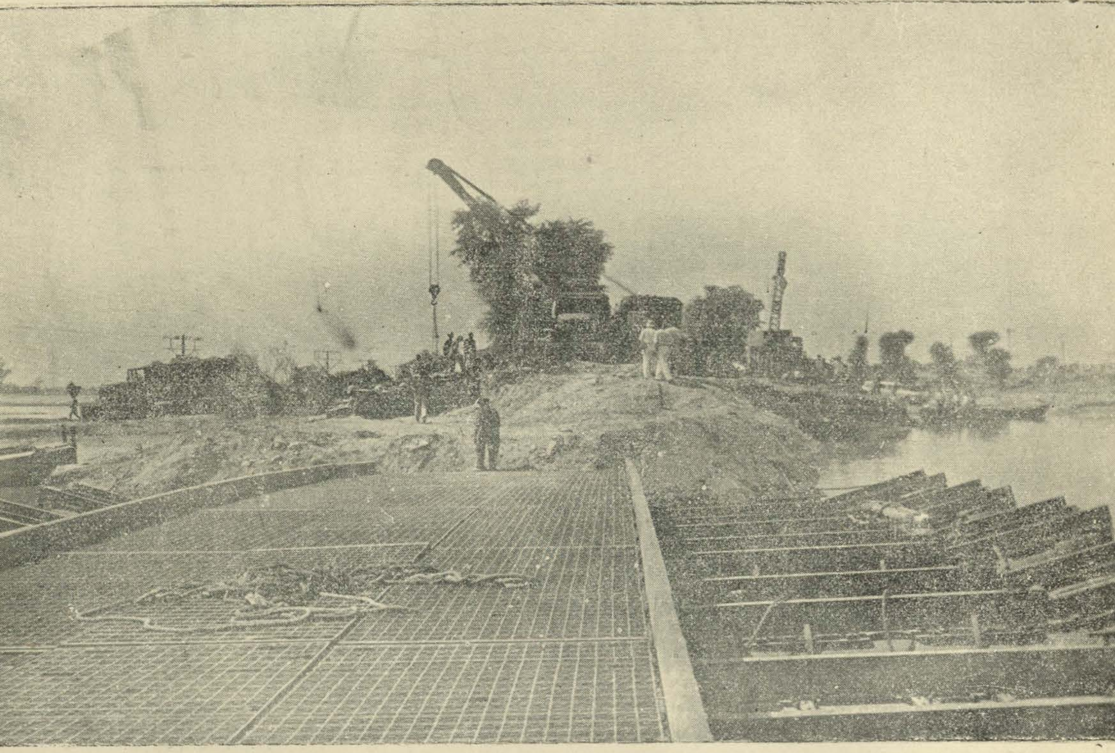
The institute advised the government on the design and siting of barrages like the Taunsa and Kotri. The diversion of the Indus on the Taunsa Barrage in one season was made possible only after thorough research. The intricate problems of training the Indus for the Gudu Barrage and the Chenab near Marala were also studied. Suggestions were given for reducing the pressure of water on the bunds and bridges of the Ravi near Lahore. Studies were also carried out for



Inside view of the hydraulic laboratory in the Irrigation Research Institute. A model of a canal fall being experimented upon

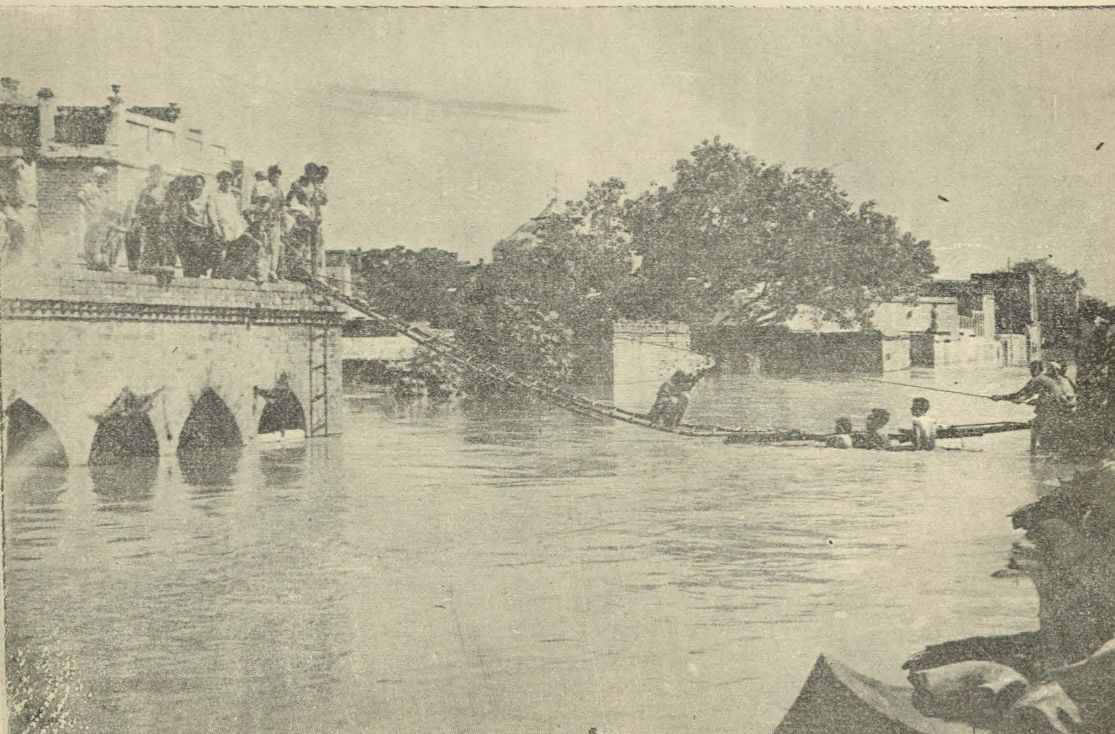
A model of River Indus prepared at an irrigation research station during experiments for the construction of the Taunsa Barrage





A pontoon bridge put up by army engineers on the Grand Trunk Road during the recent floods. The job was completed in record time

An old woman being rescued from a house surrounded by water during the floods



training the Deg nallah at the Shahdara bridge; judging the effect of the proposed railway bridge at Rohri to replace the existing Landsdown Bridge on the Indus; and examining certain questions on hydraulics pertaining to the Warsak and Mangla Dam projects.

In respect of waterlogging, the institute developed a new technique to drain off seepage water by means of backed clay drains. Experiments on evolving economical and water-tight linings for canals were conducted by the physics laboratory. Efforts are being made to find a cheap and efficient stainer for shallow tube-wells. Silt data at certain headworks and dam sites were also analysed.

Besides looking into research problems of the Buildings and Roads Department, Railways, the PIDC and WAPDA, advice was given to some foreign governments. The Iraqi Government was advised on the training of the Euphrates and the Saudi Arabian on the development of its water resources.

FLOODS

Floods have become an almost annual feature in West Pakistan causing enormous damage to life and property. There were widespread floods in 1950 in the Ravi and Chenab rivers. The most devastating floods made their appearance in 1955. The Indus river in its lower reaches passed record floods in 1956 and 1958. The Jhelum and Chenab rivers had enormous floods last year.

This year again the rivers have shown no less activity, and that too at the very beginning of the flood season. Several districts had to be declared calamity affected in July under the National Calamities (Prevention and Relief) Act, 1958.

To undertake immediate relief measures, Rs. 500,000 were at once placed at the disposal of the Commissioners and Deputy Commissioners of the affected divisions and districts by the West Pakistan Government.

The central government has been keenly observing the relief and rescue work in the affected areas, and as the final estimates about the damages are made available a suitable amount is likely to be sanctioned by it to supplement the provincial government's efforts to help flood sufferers. The assessment of losses is proceeding apace, but the task is of no small magnitude, and it would be some time before the final picture emerges.

Flood Commission

To tackle the colossal problem of floods on a permanent basis, the Government of West Pakistan set up a Flood Commission in 1958. The commission is a representative body of competent engineering talent in the country. It also enjoys the support and co-operation of such other departments and agencies as can make valuable contribution towards finding long-term solutions of the flood problem and devising ways and means in meeting immediate threats of flood havocs. The commission's terms of reference are as follows:—

(*i*) To assess the flood problem of West Pakistan as a whole and frame recommendations in connection with floods and flood control.

(*ii*) To judge the adequacy of the existing data regarding precipitation, river discharges, river regimes, reservoir sites, etc. To prepare programmes of surveys, investigations and the collection of such further data as may be required for the formulation of flood control projects with full utilization of the multi-purpose benefits of such projects.

(*iii*) To prepare a suitably phased flood-control plan consisting of long-

and short-term measures, and to work out detailed individual schemes in the context of the plan and fixing priorities.

(*iv*) To review and improve the existing flood warning system in the province.

(*v*) To recommend efficient arrangements for the maintenance of flood control and flood protection works.

(*vi*) To recommend measures to cope with emergent situations in the organization of self-help by the communities or non-official social service organizations.

The Flood Commission has prepared, approved and completed a number of flood control schemes and is working on many others. For 1959-60, a sum of Rs. 15 million has been allocated for flood protection, including new works and completion of the works which are already under way.

Relief Measures

Relief on the district level is organised by the Deputy Commissioners in the flood-affected areas, working under the supervision and control of the Commissioners concerned. Measures are formulated in the form of flood protection schemes, while relief is organised by the district flood relief committees composed of both officials and non-officials. The flood-affected areas are divided into sectors which are attended by relief parties of staff belonging to the Revenue, Police, Co-operative, Agriculture, Health and Animal Husbandry departments. On receipt of flood warnings, these parties go into action immediately with a view to arranging evacuation of the marooned people, issuing flood warnings to the threatened areas, and providing food and medicines to the affected people. Various gratuitous relief grants, *taccavi* loan and articles of human necessity are distributed among the flood sufferers through these relief parties.

Flood Relief

The provincial government put an immediate amount of Rs. 500,000 at the disposal of the Commissioners and Deputy Commissioners of the flood-affected areas in July this year. Further allocation was under active consideration when this was being written.

Besides providing a huge sum for flood prevention and flood control, in 1957-58, the provincial government made liberal grants for relief of the flood sufferers. A sum of Rs. one million was given away as gratuitous relief, while Rs. three million were sanctioned for distribution as interest-bearing *taccavi* loans to the flood-affected agriculturists. Another sum of Rs. 740,000 was provided to the Buildings and Roads Department for emergent use. Particular care was taken to see that the floods were not followed by epidemics and outbreaks of animal diseases. Facilities were provided to enable the displaced persons to reconstruct their houses in suitably planned village sites under the supervision of the local offices. In

order to relieve the flood-affected people from the burden of government dues, land revenue and *abiana* charges were remitted in deserving cases. To check the fury of floods and erosion of river banks the Forest Department prepared schemes for afforestation of river banks. Adequate arrangements were made for supply of seed to the flood-affected agriculturists.

Protective Works

More than 200 flood protection works were provided during 1958-59 all over the province covering danger points of the Ravi, Chenab, Sutlej, Jhelum, Indus and the rivers and *nullahs* of former Baluchistan areas. Protective works in connection with the Indus river alone number 152. The total expenditure on these works runs into millions of rupees.

Directorate of Hydrology

The Directorate of Hydrology, which is functioning as a source from which the Flood Commission gets its data needed for the formulation of its policies, schemes and projects, was set up in April 1958 with the following objectives:—

(*a*) To co-ordinate the activities which are being carried out by various branches of the Irrigation Department with a view to compiling consolidated data regarding water potential of West Pakistan according to internationally accepted standards.

(*b*) To extend the coverage of the data to the whole of the povince. This data is currently being collected.

(*c*) To collect hydrological data, to fill in the gaps in the existing data and remove the deficiencies in the existing techniques, with a view to standardising the data.

Besides, the Central Meteorological Service is making valuable contribution to keeping the commission informed with regard to rains and snow by conducting the necessary surveys.

LAND REFORMS

The seventh of February 1959, will ever remain memorable in the history of West Pakistan, as on this day the basic need of the province's agricultural economy was fulfilled in the shape of radical land reforms which were introduced through the Martial Law Regulation No.64. The reforms not only put an end to the half-hearted measures taken in the past, which were euphemistically called agrarian reforms, but also mark the beginning of an epoch pregnant with bright prospects for the long-suffering agricultural tenant. They herald for him a life free from social and economic inequities, and guarantee an end to feudal tyranny under which he had been smarting from time immemorial.

The rationale of these reforms has been appreciated even in India, and has won applause from Middle-Eastern and Western countries who have described the measures as most progressive. The most remarkable thing was that the commission set up by the new regime to suggest the reforms completed its work in an extremely short time, and within a few months of the October Revolution the reforms were being actually implemented.

The Reforms

A special organisation called the West Pakistan Land Commission, with the Governor as chairman, has been created to give effect to the reforms. It has been laid down that no owner of land should be allowed to hold more than 500 acres of irrigated or 1,000 acres of unirrigated land, or the equivalent of 36,000 produce-index units. However, he has been allowed to retain out of his existing holding an additional area under orchards not exceeding 150 acres, subject to the condition that the area is in compact blocks of ten acres each and has been shown as area under orchards at least since *rabi* 1956-57. Similarly, an existing owner holding more than 500 acres of irrigated land or the equivalent of 36,000 produce-index units is permitted to transfer to any or all of his heirs such additional area, if any, as taken together with any area gifted by him to all or any of his heirs on or after 14th August 1947 and any area retained by him under orchard, would bring the aggregate area so transferred to the equivalent of 18,000 produce-index units. He can also transfer an area equivalent to 6,000 produce-index units to each of his female dependents, provided she has no other source of income and is wholly dependent on him.

Recognized stud and livestock farms, as also religious, charitable and educational institutions have been allowed to retain additional areas.

Jagirs of all nature have, however, been totally abolished without compensation. The beneficiary relatives and dependents of the *jagirdars* have been given concession for getting monetary aid or grant of an area of land not exceeding the area of a subsistence holding, which in the case of the federal capital and in the Khairpur and Hyderabad divisions means 16 acres, and elsewhere a half square (or rectangle) or 12½ acres, whichever is more.

A remarkable feature of the reforms is that ejectment of tenants has been stopped for the time being. Restrictions have also been placed on the sale of holdings and on the partition of joint holdings to check fragmentation.

No Alienation

It has been provided that no person owning more than the area of an economic holding (*i.e.* 64 acres in the federal capital and the Khairpur and Hyderabad divisions and two squares or rectangles or 50 acres, whichever is more, elsewhere) shall be allowed to alienate by sale, mortgage, gift or otherwise any portion of his holding, provided that he may alienate his entire holding. So is the holder of a subsistence holding disallowed to alienate any part of his holding, except that he can alienate the whole of it. However, an owner of a holding less than a subsistence holding can sell any part of his holding to other owners in the same village, *deh*, or *mauza*. Land cultivable or other, which is *bonafide* required for the purpose of building thereon, can be sold and any tenant in possession of such land who refuses to quit after due notice may be ejected under the orders of the Deputy Commissioner. Any alienation made in contravention of these provisions shall be void.

Likewise a viable procedure has been laid down for the management of impartible holdings in the event of a dispute between the co-sharers. There is, however, no restriction on the partition of holdings jointly held by evacuees and non-evacuees, required to be partitioned in accordance with the procedure prescribed under the Rehabilitation Settlement Scheme.

Big Landlords Eliminated

In all, about 6,000 land-owners in West Pakistan, holding an area more than the ceiling prescribed under the martial law regulation, have filed their declarations. These are under scrutiny by the district and divisional authorities entrusted with the work. It is estimated that nearly 2 million acres of land will be available for resumption from the landlords against compensation payable at sliding scale rates. This compensation will be paid to them in the form of non-negotiable, heritable, interest-bearing, 25-year indemnity bonds.

The land resumed will be distributed among the sitting tenants immediately, so that they are able to sow their *rabi* crops this year as owners and not as tenants. Price of the land so allotted to

the tenants will be paid by them in easy instalments. Adequate arrangements to provide them the necessary credit facilities have been made to enable them to pay for the purchase of agricultural implements, seed, fertilizer.

A separate fund has been created in which proceeds from the sale of land will be deposited and utilised for the redemption of the compensatory indemnity bonds; payment of interest on them; development of resumed land; liquidation of bad debts; payment of administrative charges; and for such other purposes as the Land Commission may direct. This fund will be held and operated by the commission.

The cumulative effect of the implementation of land reforms will be that food production will step up, as tenants who are to be the new owners will work with greater zeal. They will be fully secure against the constant dangers of ejectment and the whims of landlords. Not only this; the entire land tenure system will be re-orientated.

LAND ADMINISTRATION

The Revenue Department is responsible for the administration of land, assessment and collection of revenue and the preparation and maintenance of revenue records. With the advent of the new regime the tempo of work in the department received a great fillip so that not only did the standard of efficiency show a marked improvement, but also the recovery of huge amounts of revenue arrears was made a reality. Within a brief span of three months after the imposition of martial law, a sum of more than Rs. 100 million, out of a total arrears of Rs. 166 million, was deposited by defaulters in the government treasury. Stringent measures are being taken to effect the recovery of the rest of the amount.

In order to improve the standard of efficiency and facilitate quick decisions in matters of public importance, the Deputy Commissioners and Commissioners were delegated considerable powers under the Financial Rules, the Civil Service Regulations and the Board of Revenue (Delegation) Rules. This has spared the public a lot of inconvenience and harassing journeys in coming to the provincial capital in quest of remedy and redressal of their grievances. The system of working in the Board of Revenue has also been revised to eliminate delays and secure expeditious disposal of work.

The Revenue Department recently played a very important role in collecting data and providing other material assistance for the drafting of the land reforms report.

Land administration has other aspects too, *viz.*, colonization, settlement of land, grant of *taccavi* to cultivators, lease on tube-well and well-sinking conditions, and rectangulation.

Colonization

The governing principle in colonization is that land must be held by the tillers. As a matter of policy, therefore, the maximum holding has been fixed at 250 acres per individual. Both food production and the development of cattle wealth are encouraged in new colony areas. For this purpose every single unit of allotment in the colony projects has to keep either one cow or buffalo or four sheep, besides other animals required for tilling. The Animal Husbandry Department is also being encouraged to allot lands for establishing cattle farms. Other nation-building departments too are being allocated lands for their activities, the emphasis being on afforestation and establishment of sugarcane farms.

New Agricultural Colonies

Already the government has floated a number of colonization schemes in the irrigated areas fed by the Sukkur,

Ghulam Muhammad and Taunsa barrages, etc. One of the biggest colonization schemes, known as the Thal Project, has almost been consummated, entailing the conversion of nearly 1·5 million acres of desert land into prosperous irrigated fields.

Next in importance is the Ghulam Muhammad Barrage commanding a total area of 2,784,663 acres of *nakabuli* (state owned) and *kabuli* (private) land. The irrigational facilities are provided through five canals of capacities ranging from 4,000 to 13,000 cusecs. In the first instance, a total area of 216,000 acres was made available for allotment in August 1957. Of this, 100,000 acres were to be allotted to landless tenants at the rate of 16 acres under perennial irrigation or 34 acres if under non-perennial. The rest was to be allotted to the Agriculture and Animal Husbandry Departments, the army, the PIDC, tribal people and owners of uneconomic holdings. The entire government land is expected to receive water supply by 1964-65, at the rate of 150,000 acres every year.

On the Abbasia canal, 45,800 acres have been proposed for allotment under *abadkari* conditions in the Districts of Bahawalpur, Bahawalnagar and Rahimyarkhan. Of this, 10,000 acres have been earmarked for the resettlement of people from the tribal areas. The remaining will be granted to the residents of the former Bahawalpur state who are self-cultivators. The unit of allotment has been fixed at 12½ acres. These lands too have been given on easy instalment basis.

The Taunsa Barrage will provide weir-controlled supply to the areas in Muzaffargarh and Dera Ghazi Khan districts covering about 1,663,940 acres, including 155,000 acres of government land. Besides, there is a proposal to supply water to a new area of 190,000 acres for 2½ months in a year. The scheme is under preparation and will be enforced shortly.

Another ambitious project is the Gudu Barrage project on the Indus, which is expected to be completed by 1961. This will have three canals which will command a cultivable area of 2·59 million acres.

Wells and Tube-wells

The government has introduced a scheme for the lease of land on tube-well and well-sinking conditions limited to the cultivators dwelling in the areas of the districts in which the lands are situated. It has also launched a grow-more-food scheme under which government waste land is leased out on easy terms for three years. In order to make the maximum use of land for stepping up food production, the Land Utilization Act has been enforced which empowers the government to take possession of any proprietary land not cultivated for four consecutive harvests. Last year more than 13,000 notices were served under the act in the former Punjab, calling upon the defaulting landowners to bring their lands under cultivation.

Settlement of Land

The preparation and proper maintenance of land revenue records, which is the basis for the assessment and realization of land revenue, is looked after by the Department of Land Records. For this purpose, various processes are adopted of which settlement *i.e.*, survey and measurement of land, is most vital for determining or revising the rate of revenue in a particular area according to the prevalent economic conditions. Settlement operations are undertaken after suitable intervals, preferably every 30 to 40 years with a view to incorporating in the records the changes in ownership that take place during that interval.

After independence, settlement work was started in the Montgomery and Rawalpindi districts. The work has since been finalised in Rawalpindi, while it is nearing completion in Montgomery. It is heartening to note that settlement work has, for the first time, been started in the Quetta and Kalat Divisions. These two divisions had for long remained unsettled and unsurveyed, with the result that while in Quetta there was no specific measure for collecting revenue, in Kalat there were no proper records to show privately-owned and state-owned land.

However, this deficiency is now being made up by the proper start of settlement work. Already considerable progress has been made. In the Hindu Bagh tehsil of the Quetta division survey work has been completed, and the record of rights in respect of 140 estates covering an area of about 39,000 acres has been drawn up. In the Qila Saifullah tehsil, 81 estates covering an area of 73,962 acres have been surveyed, while in the Sibi tehsil survey has been completed in an area of about 245,000 acres. In the Kalat division a start has been made with the Las Bela district.

Consolidation of Holdings

Consolidation of holdings is yet another important function of the Land Records Department. At present, consolidation is in progress in the districts of Sialkot, Gujrat, Jhelum, Attock, Mianwali, Jhang, Muzaffargarh and Dera Ghazi Khan. So far, the operations have covered over 180 villages, involving over 460,000 acres of land.

Killabandi

Another feature of land administration is the *killabandi* operations which were started in the area of the Thal Project and the districts of Muzaffargarh and Dera Ghazi Khan comprised in the Taunsa Barrage Scheme. A total area of about 1·4 million acres in these districts has come under *killabandi* operations which were essential to revise revenue records and give the fields a regular and symmetrical shape in view of the projected irrigational facilities from the Taunsa Barrage. This work is expected to eliminate disputes over land between owners, which is a regular feature in the villages.

Similarly, the work of revision of records in 117 villages of the Multan

district and certain villages of Bhakkar tehsil of Mianwali is also in progress.

The work of preparing proper revenue records in the excluded area of Dera Ghazi Khan has also been taken in hand to facilitate its development. For this pupose, a scheme for summary settlement was prepared and put into operation for safeguarding the interests of the right-holders. Demarcation of village boundaries has started with the help of experienced revenue staff. On the completion of this scheme the economy of the province will improve and go a long way towards easing the food situation.

Taccavi Loans

Taccavi loans are granted to agriculturists for the installation of wells and tube-wells, purchase of seed and agricultural implements and have great utility in the programme of agricultural development of the province. These loans bear interest at 5 % per annum, and are recoverable in ten years in the case of loans for wells and tube-wells, two years in the case of loans for bullocks and houses, and six months in the case of loans for seed, fertilizer, implements and fodder.

During the year 1958-59, the Government of West Pakistan earmarked Rs. 5,885,350 and Rs. 7,113,650 for the grant of *taccavi* loans to cultivators under the provisions of the Land Improvement Loans Act, 1883, and the Agriculturists Loans Act, 1958, respectively.

Out of these amounts, the Commissioners of ten divisions advanced to the cultivators sums of Rs. 3,626,332 and Rs. 5,445,213 respectively for buying implements, sinking tube-wells and wells, purchasing bullocks and tractors, etc.

During the year 1959-60, the government intends to distribute a sum of Rs. 5 million among the cultivators as ordinary *taccavi* loans under the aforesaid acts. A further sum of Rs. 20 million has been sanctioned for distribution as *taccavi* loans to the new owners of the land which is being resumed from landowners under the land reforms.

AGRICULTURE

Despite rapid industrialisation, expert opinion continues to stress the basically agricultural economy of Pakistan. This coupled with the realisation that the shortage of foodgrains must be met from within the country instead of allowing it to consume precious foreign exchange, has prompted the Government of West Pakistan to give unprecedented importance to agricultural development. The Agriculture Department has been reorganized and expanded, extension services have been augmented, pest-control measures have been intensified, and the accent now is on conveying to the farmer as much of the knowledge and experience as is available in the department, so that he can make positive efforts to better the yield of his crops. Last year, the department spent a sum of Rs. 72,318,000 on agricultural activities in the province. The current year's budget provides for an amount of Rs. 80,022,000 for the purpose. This substantial increase underlines the government's anxiety to do as much as possible in this field.

Grow-More-Food Campaign

The most important feature of the department's activities has been the drive to get more foodgrains out of the land during *rabi* 1958-59 and *kharif* 1959. Various short-term measures were adopted during the *rabi* season to step up production. These included bringing more area under food crops, supply of more water for tube-wells and open wells, production and supply of seeds of hybrid maize, potato and groundnut, distribution of ammonium sulphate and reliable nursery plants of fruit trees, the adoption of plant protection measures, and making available expert advice to cultivators.

Seed Distribution

During the year 1,374 seed and fertilizer depots were in operation throughout the province. This facilitated the supply of good seed and chemical fertilizer to the cultivator as near his land as possible. The extension staff of the department supplied 788,471 maunds of pure wheat seed to the growers during *rabi* 1958-59. The quantity covered a total area of 1,576,942 acres under wheat crop on an average seed-rate of 30 seers per acre. If increased production is taken as half a maund per acre, the total rise in yield due to pure seed should be round about 788,500 maunds.

Similarly, 903 maunds of pure hybrid maize, 449,777 maunds of pure cotton and 6,184 maunds of pure rice seed were supplied to growers up to the end of June 1959. This will raise production by 22,575 maunds, 899,554 maunds and 12,368 maunds, respectively.

The department was also able to procure 578,432 maunds of pure wheat seed and 46,200 maunds of gram seed for distribution during the next *rabi* season.

More Potato Cultivation

In West Pakistan, potato is a popular food but its cultivation is limited to some 25,000 acres. So far the absence of good quality potato seed had hindered the extension of cultivation. Foreign varieties were, therefore, introduced and 'Ultimus' of Holland was found ideal for growing both in the hills and the plains. It has good cooking qualities and has consistently given 50% higher yield than the standard variety called 'Factor' which has so far been grown here. For the last two years 'Ultimus' is being multiplied in the hilly tracts of Quetta, Abbottabad and Murree.

Under this scheme 2,500 maunds of 'Ultimus' seed was imported from Holland during March 1959 and distributed in the hilly areas for multiplication. In the beginning of the next *rabi* season, about 20,000 maunds will be procured from the hills and distributed in the plains.

Hybrid Maize Production

Maize is a crop of great potentialities. For this reason, the department is making its best efforts to expand the scope of its cultivation. Work has been in progress on hybrid maize at the Agricultural Research Station, Tarnab Farm, the Pir Sabak Seed Farm and the Yusafwala Farm near Montgomery. In the Peshawar zone, three types of hybrid maize has given a yield almost double that of the local varieties already in use. Seed production of these three types has been taken up on a large scale.

At the Agricultural Research Institute, Lyallpur, three other types of hybrids have been found most promising. They have given 40 to 50% higher yield than the commercial maize varieties. These hybrids have been released for general cultivation, and about 600 maunds of seed has been supplied for distribution to the growers.

Distribution of Fertilizer

Chemical fertilizer is the quickest effective method of obtaining higher yields of crops. During *rabi* 1958-59, a total quantity of 21,947 tons of ammonium sulphate was distributed amongst cultivators in the province. Statistics show that 210,000 acres of wheat treated with 15,000 tons of this fertilizer gave an increased yield of 840,000 maunds, i.e., four maunds per acre, while 48,629 acres under potato, fruit and vegetables when applied 6,947 tons of fertilizer augmented the yield by 486,290 maunds.

During the current *kharif* (up to end of June 1959), a total quantity of 11,047 tons of ammonium sulphate has been distributed among farmers.

Plant Protection

Plant protection work is now in operation on an all West-Pakistan

basis. Agriculture in the province has suffered considerably because of the previous absence of this work and losses due to plant pests and diseases amount to nearly Rs. 2,000 million year after year. In view of this considerable loss, the Government of West Pakistan, with the assistance of the central government, prepared its first plan for reorganising the plant protection service in 1947-48. This service is now being expanded year after year. The West Pakistan Agricultural Pests Ordinance, 1959, came into effect in May 1958. Under this ordinance, the government may, by notification, prohibit the employment of such methods of cultivation as help the spread of agricultural pests, and the transport for sale of any infested crop.

As every occupier of land in which any crop is cultivated shall be bound to carry out the preventive measures prescribed in respect of a crop or crops, it will help to make the plant protection measures really effective.

During *rabi* 1958-59, the plant protection staff of the department sprayed 68,074 acres for the control of field pests and treated 53,104 acres to get rid of rodents. It also treated about 50,120 maunds of wheat seed to control seed-borne diseases. Increased production due to plant protection measures has been estimated at 140,000 maunds of wheat.

During current *kharif*, a total area of 214,651 acres has been sprayed, and 83,551 acres have been baited for rodents. Apprehending serious damage to the rice crop from the rice-stem borer, the department launched a campaign in April 1959 for the control of pests in all the chief rice-growing areas. The targets fixed are 4,000 acres of rice nursery to cover 160,000 field acres through ground spray, and 25,000 acres through aerial spray.

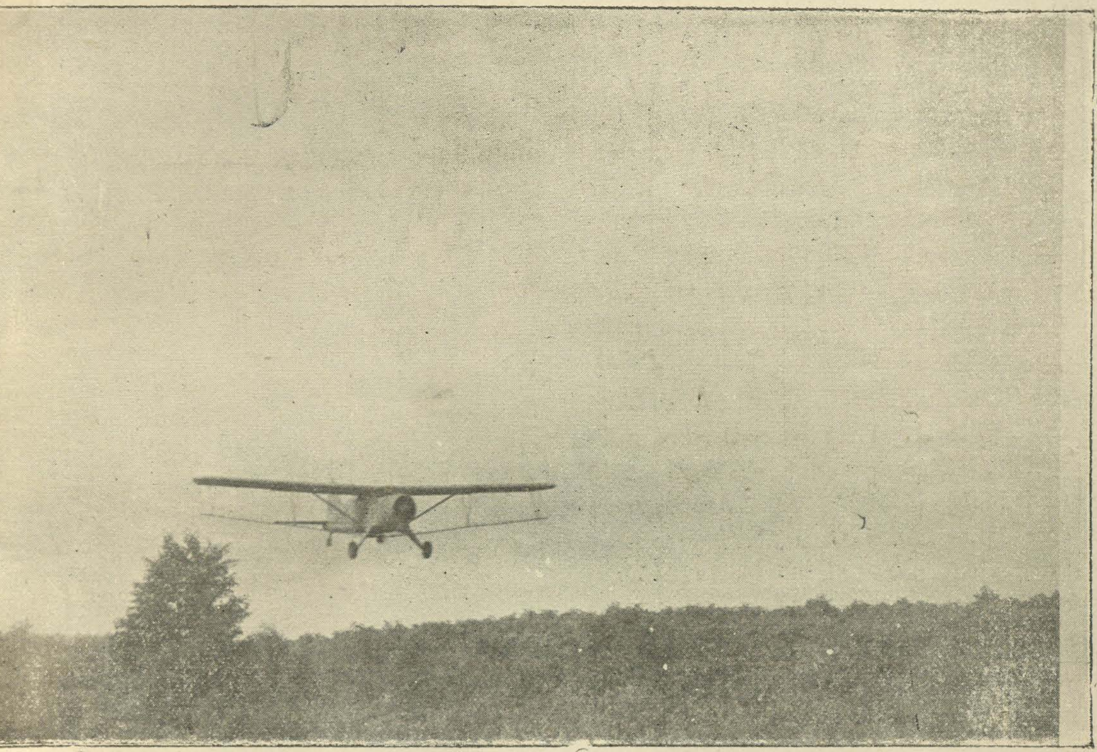
During this campaign, the plant protection staff have visited 4,065 villages, delivered 1,696 lectures and distributed 5,384 leaflets. Out of the target area, more than half the acreage has been covered for the control of the pest.

It is anticipated that plant protection measures during *kharif* 1959 will help to increase production of foodgrains by 1,060,000 maunds, of other food crops like sugar-cane by 611,000 maunds, and of non-food crops like cotton by 91,250 maunds.

Agricultural Engineering

There is an Agricultural Engineering Division of the department which attends to reclamation and breaking up of new land by means of agricultural machinery, and construction of tube-wells and open surface wells. There are seven workshops under this division, located in the province, for the repair and maintenance of departmental machinery.

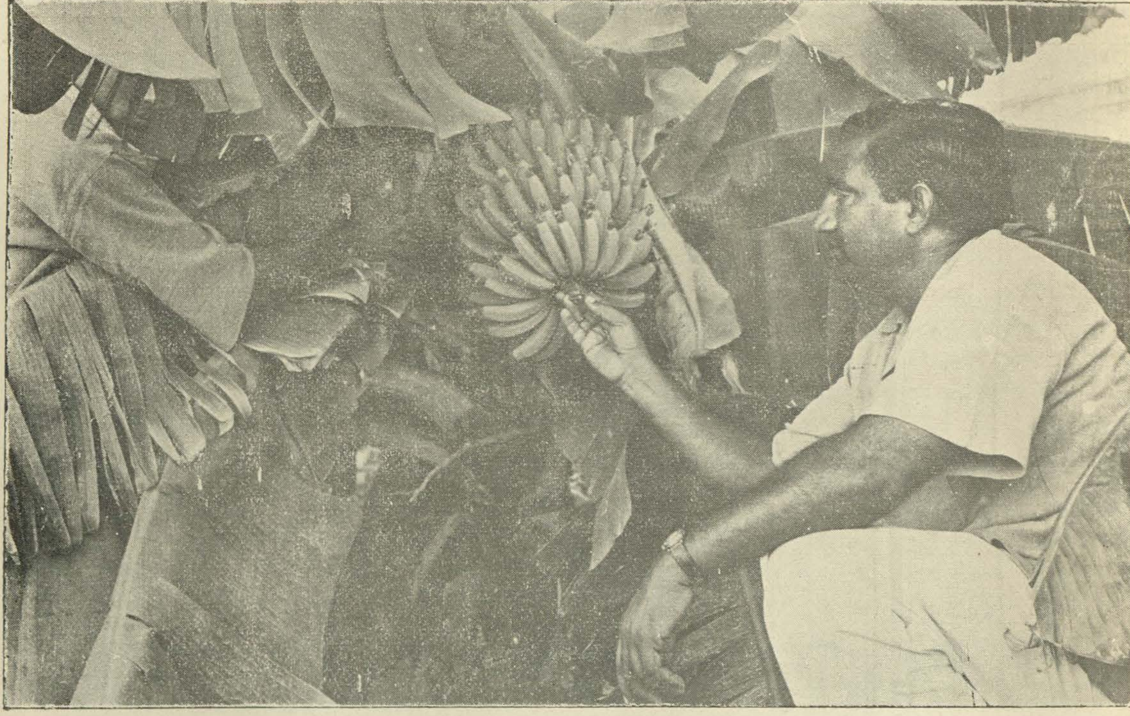
The department maintains a fleet of 134 bull-dozers and 138 wheel type tractors for hire purposes throughout the province. The hire rates vary



Aeroplanes are often used by the Agriculture Department to spray insecticides on crops

Cultivation of mulberry is being encouraged both for its fruit and for the silk industry





This is the famous Hari Chhal (Bombay) variety of banana grown successfully in the Government House Model Farm at Lahore

Farmers gather a harvest. The Agriculture Department's extension services provide on-the-spot advice to cultivators



between Rs. 15 to 54 per hour for different types and sizes of tractors.

In order to boost up food production, the government subsidises the hire charge of tractors and bull-dozers. Farmers holding land up to 100 acres get a concession of 50% while those holding more than 250 acres pay the full operational charges only. Cultivators with land between 100 and 250 acres have to pay the operational charges minus the depreciation charges. The subsidized rates do not apply to areas which can be brought under cultivation by the use of bullocks. Concessions are also given to farmers of land in non-irrigated area.

During *rabi* 1958-59, the field staff of the Agricultural Engineering Division reclaimed a total area of 27,341 acres, which will give an additional production of approximately 273,410 maunds. The area reclaimed during current *kharif* is 23,416 acres.

Under its scheme of extending minor irrigation, the department sank 360 tube-wells and dug 89 open wells during and after the season *rabi* 1958-59. By this activity perennial irrigation facilities have been extended over 44,268 acres, which means additional production of 442,680 maunds.

Extension Service

Extension work in the field is carried on by the department's staff which is spread over the whole province, serving even the remotest corner. It is responsible for all types of agricultural development work, including demonstraration and propaganda. Since *rabi* 1958-59 this staff has distributed 190,994 copies of popular instructive literature, held inumerable grow-more-food meetings, organised 104 fairs and laid out 4,381 demonstration plots.

The Agriculture Department maintains 29 vans fully equipped with motion and still projectors, tape-recorders and loud-speakers, which are utilized to popularize better methods of crop culture. These vans are distributed all over the province, and one each is maintained at the Agricultural Colleges at Lyallpur and Tando Jam.

Cotton Control Act

There are three Chief Cotton Inspectors and 76 Cotton Inspectors for the enforcement of the Cotton Control Act now in force in the old Punjab and Bahawalpur state. This act controls the cultivation, ginning, pressing and production of cotton in these areas. The revised draft of the West Pakistan Cotton Control Act is now with the government. When this legislation comes into force, it will be applicable in the whole of West Pakistan and is expected to ensure the purity of cotton at all stages.

Prizes to Cultivators

Under the special drive to increase wheat production in West Pakistan, the government has sanctioned special prizes for the best growers of wheat during *rabi* 1958-59. Twenty-nine prizes of Rs. 1,000 each will be given

away in the 20 principal wheat-growing districts in the province. The first prize will be of Rs. 1,500 which will go to the best wheat-grower in the province.

Horticulture

At present, 90 fruit nurseries are maintained by the department for the purpose of raising pedigree fruit nursery plants throughout the province. During the period under report, about 700,000 fruit plants were distributed among growers. This included 50,000 plants of kinnow *sangtara*, 10,000 banana suckers and 30,000 mango grafts. Good work has been done in introducing the banana in Mirpurkhas, Haripur, Bannu and Kalabagh areas, and the *sangtara* in the citrus-growing areas. In addition, 10,000 lbs. of vegetable seed was also given away to the growers. Two hundred short courses on fruit and vegetable preservation were arranged, which were attended by 12,000 trainees.

Turmeric is another important crop receiving special attention. The cultivated area is increasing and within two years West Pakistan should be self-sufficient in this commodity and will no longer have to import it from India.

Statistical Organisation

A statistical organisation within the Department of Agriculture has been set up to compile correct agricultural statistics and to provide necessary help to researchworkers in the planning and statistical interpretation of research experiments. This organisation now compiles the crop estimates of the entire province and issues them regularly. Besides, data on various departmental activities is collected, thus making it possible to evaluate the results of various activities.

The objective methods of crop estimation are being developed by the statistical organisation by which yield of crops can be known more accurately. An objective crop estimation sample survey on wheat was undertaken during *rabi* 1958-59, throughout the province and was completed successfully. A similar sample survey will be undertaken during *kharif* 1959 to estimate the yield of rice in West Pakistan. Statistical sections also exist in the agricultural colleges.

Agricultural Education

There are three agricultural colleges in West Pakistan viz., Agricultural College, Peshawar, Agricultural College, Lyallpur and Agricultural College, Tando Jam. The Peshawar college is affiliated with the Peshawar University and is under its administrative control. The Lyallpur college is affiliated with the Panjab University but is under the administrative control of the provincial Agriculture Department. The Tando Jam college, which is affiliated with the Sind University, is also under the administrative control of the department. A number of scholarships are being awarded by the

department for the students studying in the Agricultural College, Peshawar, and it also keeps a watch on the progress of this institution. The total number of students in the B. Sc. (Agr.) class of the three colleges was 1,064 in July 1959, as compared to 308 in the year 1947-48. Since the integration of West Pakistan in October 1955, the expenditure on agricultural scholarships has gone up from Rs. 11,090 to Rs. 352,410. In the three colleges, 386 scholarships were sanctioned by the government in 1958-59.

Three training centres to produce field assistants were opened in 1957-58 at Peshawar, Hyderabad and Quetta. Last year, three more centres were opened at Sargodha, Khairpur and Khanpur. The training period is one year and at each centre 50 scholarships worth Rs. 50 each are available. A class for 150 students in Urdu is also conducted at Lyallpur.

Agricultural Research

Research was continued at the two Agricultural Institutes of Lyallpur and Tando Jam, the Research Station, Tarnab Farm (Peshawar), the Sugarcane and Sugar-beet Research Station, Mardan, and the Agricultural Research Stations at Khanpur and Quetta.

The main achievement of the department in the field of research has been the evolution of improved varieties of almost all the crops, of which wheat, sugarcane, cotton, rice, gram and fodder are prominent.

Wheat

The new varieties, C-271 and C-273, evolved at the Lyallpur Institute,, have been given out for general cultivation since 1957. These are general purpose varieties and possess fair field resistance to yellow and brown rusts. Being stiff-stemmed, both are resistant to lodging and can stand the application of high doses of fertilizers now widely recommended to step up food production. These varieties are equally suitable for sowing on average fertile soils and on rich soils, as well as under late sown conditions in the irrigated areas. They can thus advantageously replace C-591, C-518 and C-228, the existing commercial varieties, and are fast becoming popular with growers.

New wheat varieties evolved by hybridization under field trials after independence at the Tando Jam Institute, are H-68 and H-20-I. As compared to the standard C-591, these varieties yield 11 % and 7 % more respectively. H-68 has been released for general cultivation.

As a result of the efforts of the staff working at the Agricultural Research Station, Tarnab Farm, a variety called Dirk, of Australian origin, was singled out in 1952 for its comparatively outstanding growth and strong stalk and made the subject of protracted yield tests under good irrigation conditions. It has consistently upheld its superiority as compared to C-591, C-518,

C.271, C.273, H-68, etc., and under varied conditions spread over a period of two to five years has given 11 to 19% higher yield than all other commercial varieties. Arrangements to increase Dirk wheat seed will be made from the next season.

Sugar-cane

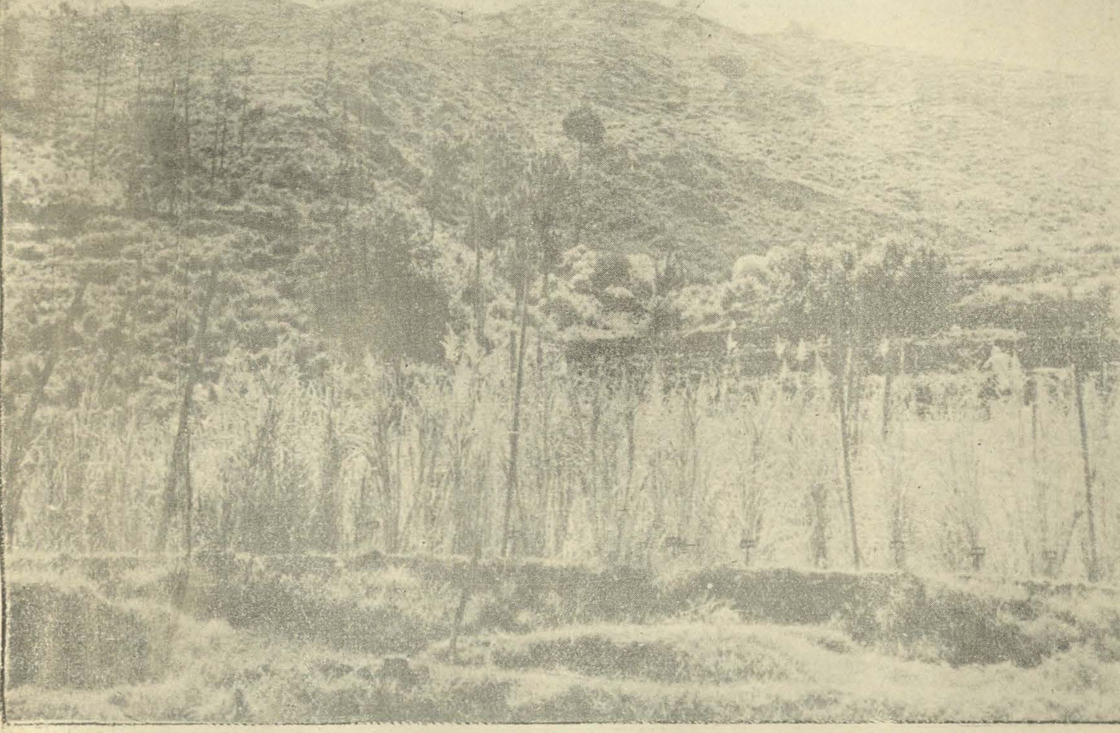
After independence in 1947, the supply of viable hybridized fuzz (true seed of sugar-cane) from Coimbatore in South India to what is now West Pakistan, was stopped, and within a few years the research stations in this part of the sub-continent ran short of even the basic seed material for evolving new cane varieties, etc. It became necessary, therefore, to find ways and means to induce flowering and fertility in sugar-cane to raise fuzz under local conditions, which had hitherto been considered infeasible. The Sugar-cane Research Station at Lyallpur, which had to provide new varieties to the largest cane tract in Pakistan, concentrated mainly on this problem.

Investigations began here in 1950, and by 1955 two means had been found for obtaining viable seed under sub-tropical conditions. The first method involved modification of the environment by the artificial application of abundant irrigation and exposure to strong illumination at night. The second was exposure to natural conditions prevailing at altitudes between 2,500 and 4,000 feet in the neighbourhood of Murree. Since 1955, a number of varieties have flowered and produced viable seed as a result of these treatments. During 1958-59 alone, about a thousand fertile arrows have been available which provide ample scope for raising new promising seedling canes for many years to come.

The variety Co-312, first approved by the Agriculture Department of former Punjab in 1934, began to show signs of deterioration, and after independence it almost completely ran out, with no replacement in sight. However, the next seven to eight years saw Co. L-29, Co. K-30 and C. I-38 approved by the department as early varieties, and Co. L-44 as late variety. Subsequently, the most promising of the varieties, Co. L. 54, which had been undergoing trials for many years, was found to have out-yielded all others so far evolved for this important cane tract, giving yields of 1,400/1,500 maunds of cane and 130 to 140 maunds of *gur* per acre. This variety is now being multiplied for large-scale distribution to cultivators.

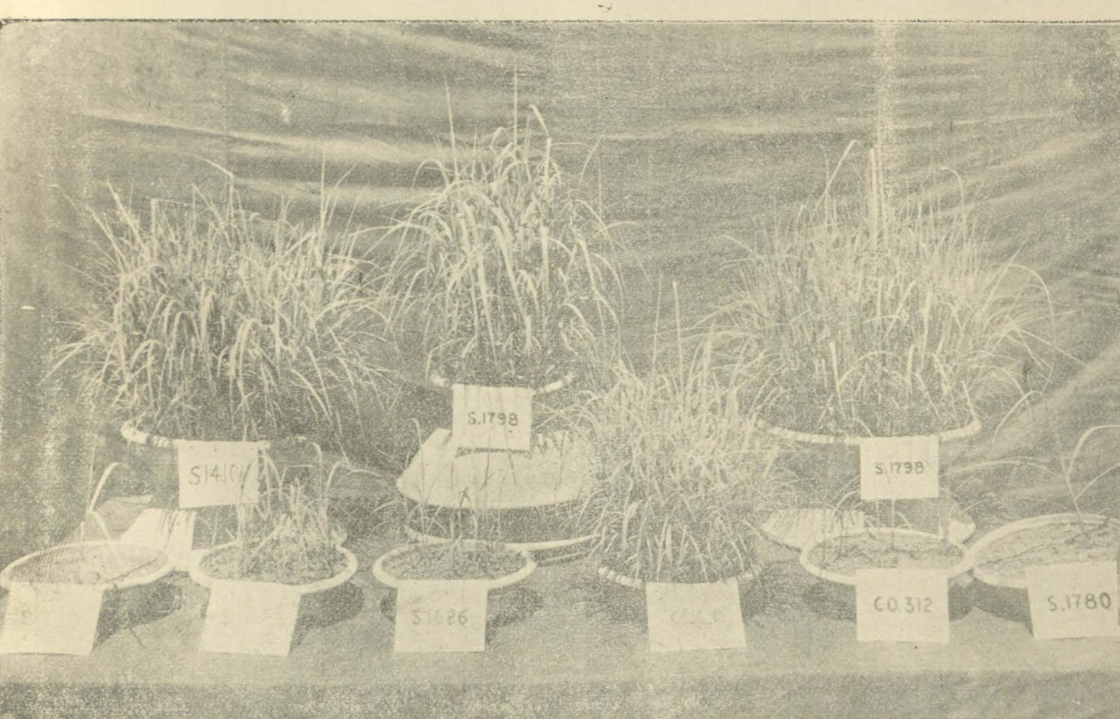
After independence, there has been vast expansion of sugar industry in the Peshawar region which has very favourable climatic conditions for growing sugar-cane. Two sugar mills, one at Mardan and the other at Charsadda, were set up as a consequence of the increase in cane acreage which was 116,000 in 1947-48, and is now 172,000.

The future programme of the Sugarcane Research Station, Mardan, is to work for varieties even better than its



Arrowing in different sugar cane varieties under field conditions at Charapani, near Murree

Sugar cane seedlings grown from seed produced at Charapani





The Agriculture Department is constantly experimenting with new cash crops. This is a successful crop of turmeric which will not have to be imported from abroad after some time

A field of bidi leaves. These too are imported, but the province hopes to become self-sufficient in the near future



popular and successful Co. 622, Co. 245 and Cos. 321, and also to reduce the cost of cane production. Research work has also been in progress on sugar-beet since 1951. During this time, over 36 varieties of this vegetable imported from various foreign countries have been worked upon, which has proved beyond any shadow of doubt that Peshawar valley is as favourable for the production of this plant as any other beet-growing country. The installation of the necessary machinery in the Charsadda Mill for producing sugar out of beet is the result of these findings. Of the beet varieties experimented with at Mardan the German E. N. and the Hungarian C 242/53 are outstanding in their performance.

The institute at Tando Jam recommended Co. 421 and released it for general cultivation. It yields 600 maunds per acre and its sucrose content is 16 %

Cotton

4F, L.S.S., 289F/43, 124F and 199F were the commercial varieties of cotton grown in the former Punjab at the time of independence. Research work on cotton in this area has given very good results and a number of new high-yielding and better quality varieties have been evolved. Lasani-11, AC 134, 362F and 231R were approved by the West Pakistan Cotton Control Board for general cultivation in August 1958 and notified under the Punjab Cotton Control Act in February 1959.

Lasani-11 has been released for general cultivation in the Multan, Muzaffargarh and Dera Ghazi Khan districts, to cover about 300,000 acres. Its staple length is $1\frac{1}{8}$ to $1\frac{3}{8}$ inches, its ginning out-turn is 33% and it spins 60's to 70's. It has been selling at a premium of Rs. 5 to Rs. 10 per maund over the old varieties and gives about one maund more yield than 124F. Variety A. C. 134 is being grown in the whole of the Montgomery and Lahore districts. Its staple length is 1/16 inch, a ginning out-turn of 37% and spins 50's to 60's. It has about 3% more oil in the cotton seed than 4F and L.S.S. It has been selling at a premium of Rs. 3 to Rs. 8 per maund of seed cotton over the old varieties in the Montgomery district during the last 3 years, and gives about 1 to 2 maunds more yield per acre than 189F/48 and 4F.

Other good varieties are 362F which has been found very suitable for the upper Thal area; 231R which has been released for general cultivation in 180,000 acres; and 287F, AC 158 and AC 184, which were put under the seed multiplication programme in 1958-59 to replace some old varieties.

The general cultivation of all these superior quality cottons will increase production by 400,000 to 500,000 bales, bringing additional annual income worth millions of rupees to growers and to other sectors of the cotton industry, besides earning valuable foreign exchange.

Good work has also been done by the Cotton Breeding Station at Tando Jam. It has evolved the Tando Jam Desi No. 1, a short and coarse staple variety giving a good yield and ginning percentage; and M100 a long staple American variety spinning 50 to 60 counts.

The station has also worked as the collection, maintenance and study centre of about 500 cultures of different species of cotton grown all over the world. Research work in various sections has been in progress during the current year according to the annual programme approved by the Director of Agriculture, West Pakistan.

With a view to solving the fodder problem of the province during the summer months, a cross between *bajra* and Napier grass was made and found to be very good in both palatibility and growth. The fodder yield is likely to exceed 200 maunds per acre annually.

URBAN RESETTLEMENT

The year 1959 can in some ways be considered the most important in Pakistan's short history, for it is witnessing the solution of the biggest and most complex problem facing the country—thetask of urban refugees resettlement. This problem, which remained undecided and unresolved for the last 11 years, has only now been tackled in a sincere and positive manner, and the speed at which things are moving under the new regime the whole problem should certainly end by December 1959.

Compensating the Refugees

Immediately after the enforcement of the Displaced Persons (Compensation and Rehabilitation) Act, 1958, through a special ordinance, the settlement of claimant displaced persons was taken in hand under a provisional compensation scheme calculated to adjust their claims against the evacuee properties occupied by them. A phased programme to gain the end was prepared, and with the transfer of evacuee houses and shops to the claimant allottees, the first phase will be over by the end of September 1959. To implement this phase, Settlement Scheme Number I was enforced and claimants were asked to submit their applications on Form A to determine the compensation payable to them by the government after deducting rent arrears and other charges due from them. Claimants have submitted the forms against which compensation books are being issued.

Transfer of Properties

To bring about the transfer of evacuee houses and shops, the claimants in legal possession of these properties have been asked to submit forms CH (Claimant House) and CS (Claimant Shop). Non-claimants too have been asked to do likewise, the forms in their case being NCH and NCS. The claimants will get the property on 1946 rental basis, multiplied by 40, while the non-claimants will get the property at a price 30% higher in Karachi, 15% higher in Lahore, Multan, Peshawar, Rawalpindi, Hyderabad and Lyallpur, and 5% higher elsewhere.

In cantonment areas the price of an evacuee house and shop would be evaluated on 25 years rental basis for claimants. Locals in lawful possession of houses the value of which is Rs. 10,000 or less are also entitled to apply for their ownership on Form LH. They are, however, not entitled to get a shop even if they hold a regular allotment for it.

Factories and Mansions

Settlement Scheme No. 2 relates to the disposal of evacuee ind industrial

concerns. For the present, the auction of seasonal factories like cotton-ginning and rice-husking mills has been included in the scheme, and this work will have been completed by the end of August 1959.

Settlement Scheme No. 3 aims at the disposal of big mansions and hotel buildings through unrestricted public auction. Big mansions are taken as those buildings which fetch a monthly rent of Rs. 500 or more.

The scheme for the disposal of registered and unregistered evacuee industrial concerns other than ice factories, cotton-ginning and rice-husking mills will be put into operation shortly. Another scheme for the disposal of evacuee open sites is also in the offing.

Kashmir Refugees

Settlement Scheme No. 4 relates to the rehabilitation of persons displaced from Indian-occupied territory of the Jammu and Kashmir State. Besides claimants from occupied territory, more than 60,000 ration-drawing Kashmiri refugees are also being settled in the border districts of the province.

Final Phase

As regards the second phase of the transfer of evacuee houses to claimant non-allottees, applications on specially prescribed forms will be invited in September 1959. List of available evacuee houses will be publicly displayed and as such the claimants will be given a wide range of properties to choose from. A lot-drawing system will be adopted for deciding the transfer of evacuee houses earmarked by such category of claimants.

By end-December old evacuee property units which number over 341,000 will cease to be evacuee property and will be provisionally transferred by different modes to the applicants till they clear the balance of payment and get the entire entitlement to the property.

New Satellite Towns

A National Housing Scheme for the rehabilitation of non-claimant displaced persons is also under preparation. New satellite townships with allied industries will be developed, and the new settlers will not only find themselves socially rehabilitated but will also be assured of a definite economic basis of life.

The provincial government has in hand 36 satellite town schemes to provide accommodation to displaced persons according to income-wise categories. These schemes comprise 5,301 sites for A category families having an income of Rs. 500 or more per month, 11,432 sites for B category families with incomes between Rs. 150 and Rs. 500 per month, and 42,472 sites for C category families with incomes below Rs. 150.

In addition to about 59,000 residentials sites, the schemes include over 3,200 commercial sites and over 13,700 constructed quarters to be allotted on hire-purchase basis on easy instalments. Of these 36 schemes, seven have already been completed, 11 are nearing

completion and 18 are in different stages of development and construction.

Other Schemes

The Urban Rehabilitation Department, which is entrusted with these schemes' has also planned 23 new schemes in the towns of Lahore, Lyallpur, Gujranwala, Montgomery, Sargodha, Bahawalnagar, Hyderabad, Mirpurkhas, Sukkur, Khairpur, Nawabshah, Peshawar and Quetta. These schemes, which are under scrutiny of the central government, envisage about 100,000 sites of A, B and C categories. The Pakistan Government has so far allocated Rs. 118,700,000 as grant, in addition to a loan of Rs. 20 million, for the construction of over 6,300 one and two-roomed quarters in different satellite town schemes.

During the past year, the department developed 3,800 sites, and constructed over 3,000 houses, involving an expenditure of Rs. 1,39,84,806. The pace of recovery of price from the allottees has also increased under the new regime, showing the total recovery made during the year as Rs. 4 million as against Rs. 3 million recovered during the last year. Preparatory work to implement the new schemes is in full swing.

REFUGEE REHABILITATION

The dawn of independence brought in its wake a multitude of problems of which the settlement of millions of displaced persons was the most difficult, both in its magnitude and in the complications it involved. Nearly nine million persons who were hounded out of their hearths and homes trekked into Pakistan, more than half of them penniless, and thousands of them wounded and maimed. Obviously the resettlement of such a large uprooted multitude which constituted the biggest migration in world history was enough to shake the mightiest of countries, let alone a new-born nation like Pakistan. However, with a will and energy rarely seen among peoples, the administration gave top priority to the resettlement and rehabilitation of these millions.

Rural Resettlement

The problem had two aspects, rural and urban. Since the bulk of the displaced persons belonged to the agricultural class, emphasis was laid more on rural resettlement. Early in 1948, a scheme was introduced under which claims for land were invited from refugees from the agreed areas, namely the Punjab (India), Punjab (India) states, Delhi province and some the other princely states adjoining these territories. In all, 1,386,000 claims were registered, and after their verification from the Central Record Office, they were sent to different districts for allotment of land to the claimants. So far about 1,328,000 claims have been finally disposed of, entailing an allotment of over 5·5 million acres of land. The remaining are under scrutiny and certificates of entitlement are being issued from time to time. The resettlement of displaced persons from agreed areas is thus nearing completion. The local officers have been directed to settle outstanding claims in their districts by 15th October 1959. The promise made by the new regime on the imposition of martial law in October 1958 will thus be kept.

Simultaneously, the disposal of applications received in the Central Record Office for temporary allotment of land by way of interim relief to claimants under Schedules IV and V of the Registration of Claims (Displaced Persons) Act 1956 is progressing well. Out of 11,956 applications received under Schedule IV, 11,820 were finally disposed of and certificates of entitlement issued to the district authorities for allotment of land. Under Schedule V, more than 16,300 applications were received, of which 16,186 have been scrutinised and finally disposed of.

A scheme for allotment of land to displaced persons from non-agreed areas on a quasi-permanent basis has also been put into operation. Applications are being received in the Central Record Office, and after their verification, entitlement certificates are being issued for allotment of land under the supplementary scheme.

To infuse a sense of security in the claimants, steps are being taken to make allotments on a quasi-permanent basis automatically permanent without calling for applications from the allottees.

Unearthing Hidden Property

For this purpose it was essential to eliminate bogus or inflated claims. Accordingly, a stern warning was issued, which was followed by the promulgation of a martial law regulation fixing 31st December 1958 as the deadline for declaration and surrender of unauthorisedly held evacuee property. The Evacuee Property Intelligence Bureau was set up, which is making efforts to unearth hidden evacuee property. Its efforts have shown encouraging results leading to the recovery of evacuee property worth over Rs. 20 million, including land, houses, shops, industrial units, etc., which are now being utilised for the disposal of genuine claims.

New Border Scheme

In view of persistent complaints against irregularities committed in the allotment of land under the border settlement scheme, the government started a probe into the matter and all allotments have been subjected to strict scrutiny. In fact, a new border scheme has been introduced to minimise the chances of malpractices. A committee consisting of a representative each of the army and the local district administration has been constituted to carry out allotments in the border areas under the new scheme.

Kashmir Refugees

To crown all, the Rehabilitation Department has also taken in hand the resettlement of about 60,000 ration-drawing Jammu and Kashmir displaced persons on agricultural land in six border districts. Moreover, 32,000 acres of land have also been reserved in the Ghulam Muhammad Barrage area for the resettlement of Jammu and Kashmir refugees. A separate scheme for settling them permanently by alloting land against their claims under Schedule V (Displaced Persons Act 1956) has also been put into operation. Claimants under Schedule IV who desire to get rural agricultural land against their claims have been given the option to do so.

HEALTH SERVICES

The October Revolution brought in its wake a complete reorientation of the medical facilities available in the province. In pursuance of the ambitious policy announced by the new regime to afford every possible assistance to the common man in all spheres of life, medical aid was given top priority, and special powers were assigned to the Health Services Department to tackle the acute but vitally important national problem of improving the health of the millions.

Unlike the practices of the past, the new regime meant business, and immediately a long-term plan was announced which envisaged to carry medical aid to every home. Emphasis was laid on equipping the rural areas with all modern medical facilities so that the people in the villages who constitute 85 % of the total population, could derive the maximum benefit from the large number of hospitals and dispensaries to be opened in the country under the plan. As an immediate measure, a probe was ordered into the affairs of the Health Department in order to assess the existing medical facilities and to streamline the hospital administration, as also to help raise the tempo of efficiency.

More Beds in Hospitals

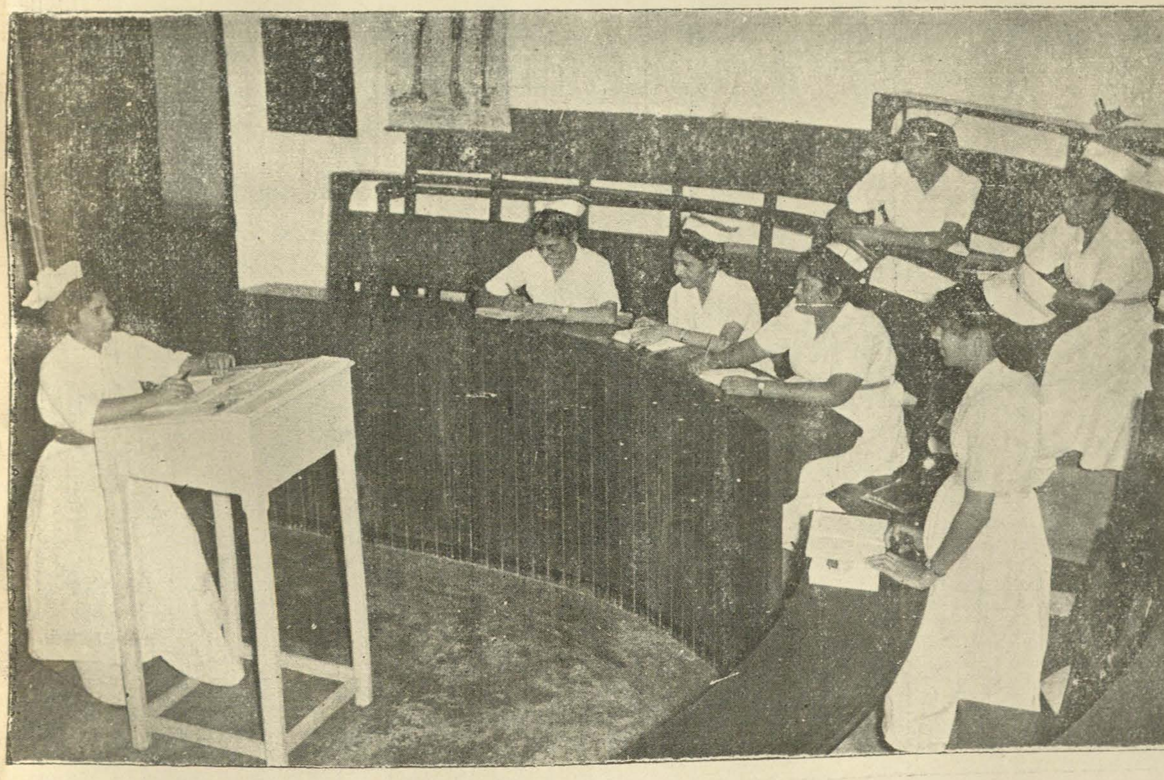
The three-point short-term plan aimed at increasing the number of beds in hospitals; improving the working of government hospitals and medical colleges; and maintaining a high standard of health services in the country. Without wasting a moment, this plan was put into practice, and medical administrators drawn from the Army Medical Corps were placed in hospitals and colleges to make their administration and management more efficient and effective.

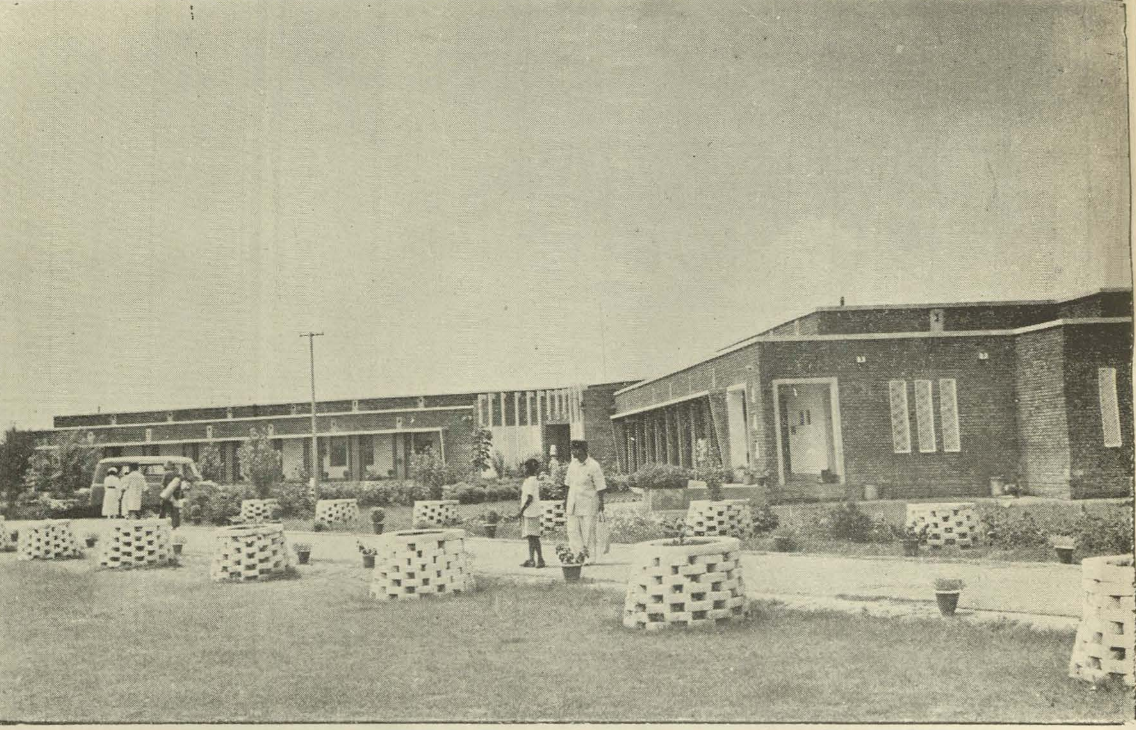
The first task admittedly a difficult one due to past practices—of these military administrators was to restore confidence among the general public that the government was sincere in its efforts to provide as much medical assistance to them as was possible for it within its limited resources. The number of beds in all hospitals and dispensaries was raised to accommodate more indoor patients. In West Pakistan the total number of beds available in civil, jail and railway hospitals and dispensaries on 30th June 1959 stood at 20,670. This compares favourably with the figures obtaining before the advent of the new regime as the bed strength has now been augmented by about 50%. This not only underlines the earnest desire of the present government to increase medical facilities for the poor but also gives practical proof of the fact that Pakistan is well on the road



Parts of the Nishtar Medical College Hospital at Multan are still under construction. The hospital is fully air-conditioned

A nurses' class in session in the Nishtar Medical College Hospital, Multan





The new 500-bed Lahore General Hospital at Kot Lakhpat was set up within a few months

*The newly built extension to the Fatima Jinnah T. B. Sanatorium at Quetta.
It has bed accommodation for 100 patients*



to becoming a welfare state, wherein no one would be deprived of the basic rights and privileges of a free citizen of an independent country.

Increased Expenditure

A cursory glance at the budgetary provision for health and the actual expenditure under this head during the year 1958-59 should convince anyone of the importance being given to the provincial health services in order to make available maximum medical relief to the people. A sum of Rs. 43,995,900 was provided in last year's budget, but the actual expenditure shot up to Rs. 50,134,700, thus an extra amount of Rs. 6,138,800 was spent on health by the provincial government. In the current year's budget too, health services receive a sum of Rs. 44,340,500.

New Schemes

Sixteen new schemes costing Rs. 817,850 have been sanctioned to accelerate the pace of progress in the medical field. These include the establishment of a public health school at Hyderabad at a cost of Rs. 129,380; purchase of equipment for hospitals and dispensaries in the Kalat division at a cost of Rs. 100,000; provision of 56 extra beds and staff to the 100-bed T. B. Sanatorium at Kotri at a cost of Rs. 129,250; conversion of the dispensary at Gwadar into a six-bed indoor hospital at a cost of Rs. 16,590; providing buildings for dispensaries at Pasni and Dhadar in the Kalat division at a cost of Rs. 60,000 ; providing an X-ray plant to the Lahore General Hospital at Kot Lakhpat at a cost of Rs. 76,740; establishment of a cardiovascular unit at the King Edward Medical College, Lahore, at a cost of Rs. 38,430; and the opening of ten more maternity and child health centres in the Peshawar and Multan regions at a cost of Rs. 52,670.

The bed strength of the Lady Reading Hospital, Peshawar, has been increased by 268, and the number now stands at 683. A new surgical block has been added to cope with this additional accommodation.

New Hospitals

A new 500-bed hospital, known as the Lahore General Hospital, was recently planned and opened within a matter of a few months. This has been a great and remarkable achievement of the present regime and reflects its earnestness in the field of public welfare. All facilities of specialised and modern treatment have been provided in this institution.

Another 100-bed hospital was opened during the year at Thatta. This has also been provided with modern equipment and qualified staff. Yet another hospital with 100 beds is being provided to cater for the needs of government servants at Lahore. A 50-bed maternity ward has been started in the premises of the Civil Hospital, Rawalpindi, to meet the medical needs of the local womenfolk.

Thirty-two rooms have been added to the Albert Victor wing of the Mayo Hospital, Lahore, for the convenience of provincial government employees. The buildings have been completed and occupied, while the work to air-condition them is to start soon at a cost of Rs. 593,400.

The government dispensary at Gwadar which was recently merged with Pakistan has also been upgraded and converted into a six-bed indoor hospital. A sum of Rs. 372,300 has also been sanctioned by the government to renovate the existing building of the Social Welfare Home at Khairpur and to convert it into a 100-bed hospital in order to meet the increasing demand for medical facilities in the area. A 50-bed hospital is also under construction at Sujawal in the Thatta district.

An ambitious programme has been chalked out by the department to establish new dispensaries in Mastung, Dhadar and Pasni in the Quetta and Kalat divisions. In addition, new modern hospitals are also proposed to be built at Gujrat, Jhang, Montgomery, Sialkot and Sanghar. Sites for some of these hospitals have already been selected, and necessary preliminary arrangements have been finalised. It has also been decided to provincialise the civil hospital at Kharian in the Gujrat district, and to convert it into a fully equipped modern hospital. Construction work on a 500-bed hospital at Jamshoro is in full swing. This is to be attached to the Liaquat Medical College, Hyderabad. A separate children's block has been constructed in the Mayo Hospital, Lahore, at a cost of Rs. 390,660.

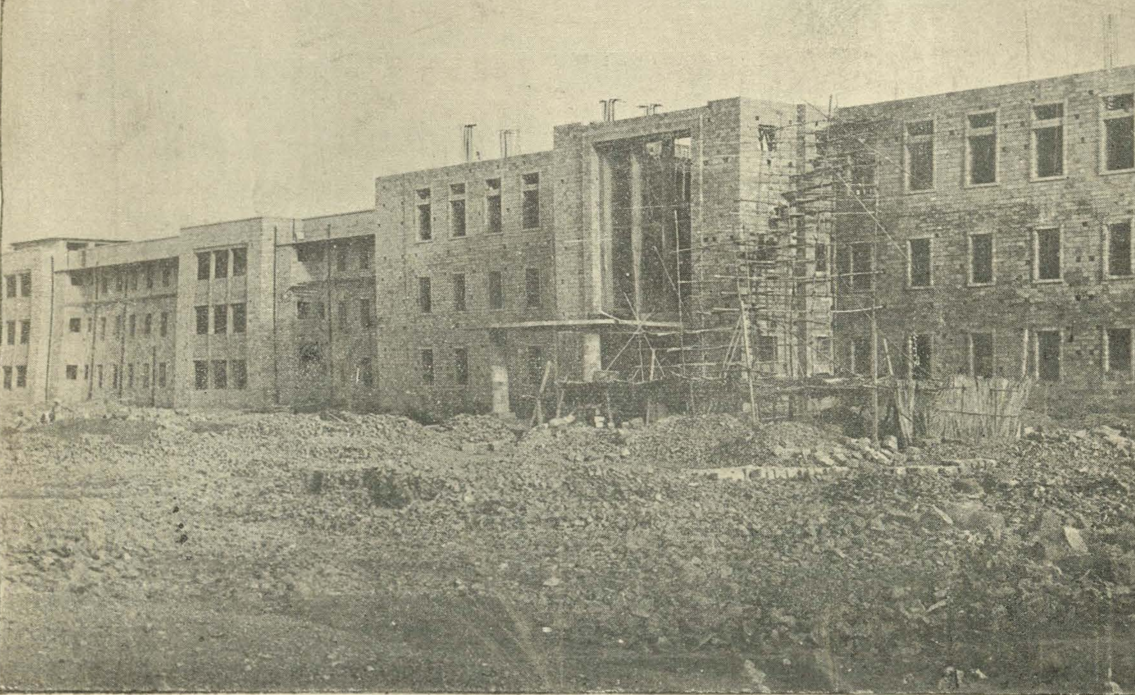
More Doctors

Although considerable headway has been made in providing more medical education opportunities, great emphasis is still being laid by the government on producing more and more qualified doctors so that people in the rural areas can be provided with better and cheaper medical treatment.

There were only two medical colleges in the province when Pakistan came into being in 1947. It is no small achievement that during this short span of 12 years, four more first class colleges have been opened. These are the Fatima Jinnah Medical College for Women at Lahore; the Khyber Medical College at Peshawar; the Nishtar Medical College at Multan; and the Liaquat Medical College at Hyderabad. All of these colleges, except the one at Hyderabad, are now admitting one hundred students annually. The college building at Hyderabad is being expanded and thereafter the present strength of 75 would also be raised to 100. A college of dentistry is also functioning at Lahore where 30 students are admitted every year.

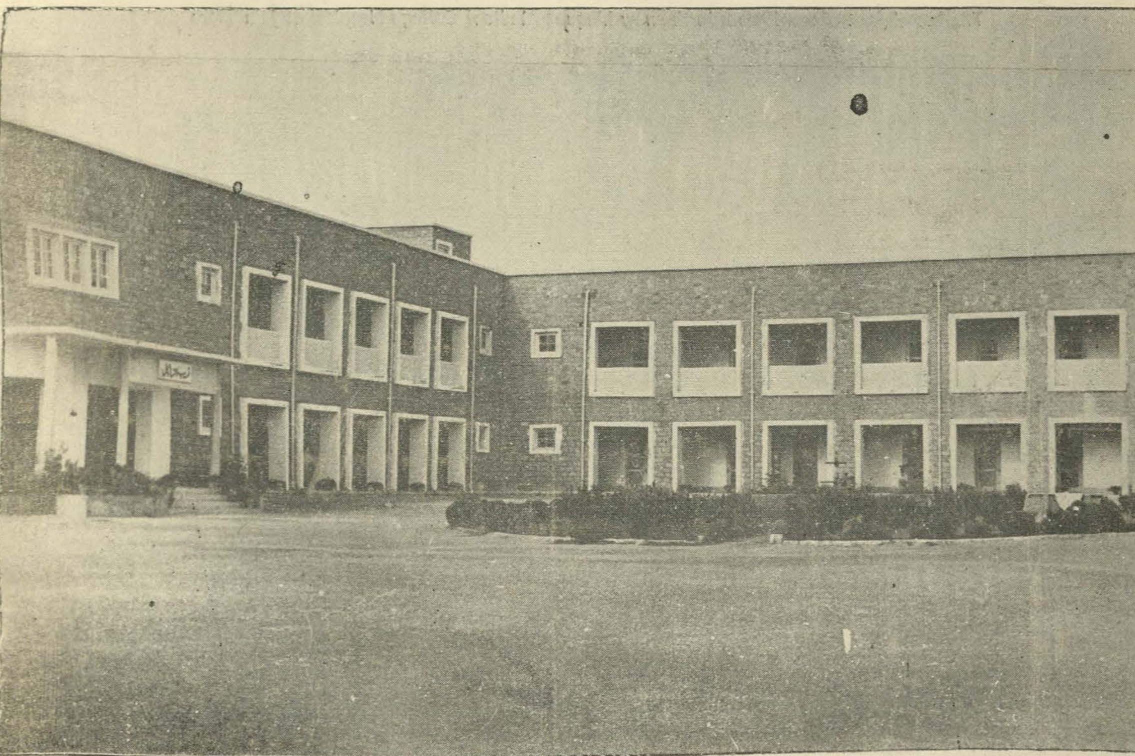
Health Buildings

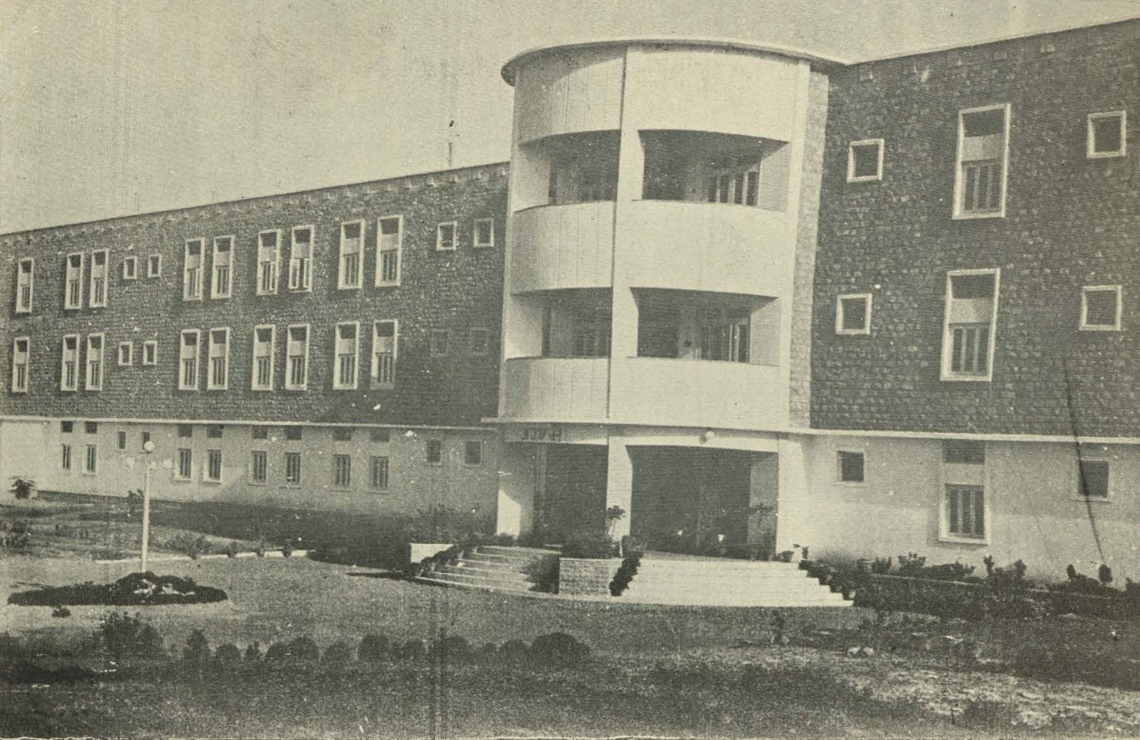
The West Pakistan Government has sanctioned a sum of Rs. 19,615,000 for the construction of the buildings of the Liaquat Medical College at Hyderabad.



The Liaquat Medical College Hospital under construction at Jam Shoro

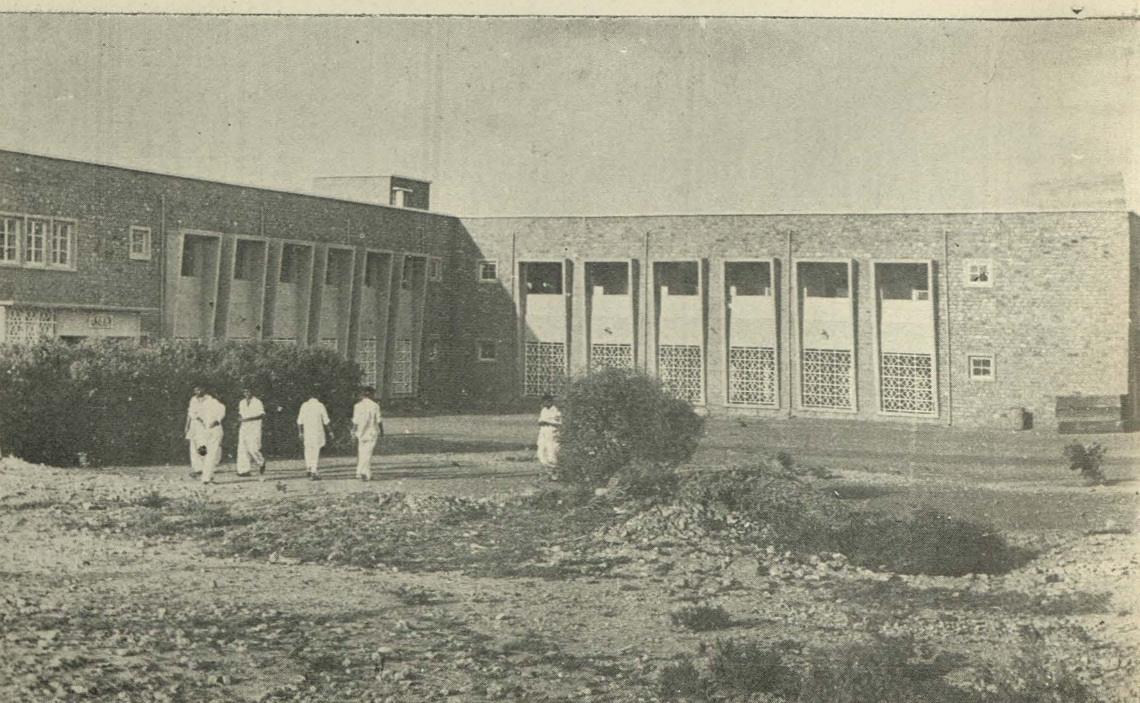
Trainee lady doctors live here in the new Liaquat Medical College Hospital at Jam Shoro





The hostel for trained nurses in the Liaquat Medical College Hospital at Jam Shoro

The hostel for trainee doctors in the new Liaquat Medical College Hospital at Jam Shoro



This includes expenditure on hostels for both men and women students, a 500-bed hospital and residential accommodation for the essential staff, students and nurses. The buildings are expected to be completed by 1961.

Buildings in the Nishtar Medical College, Multan, are to cost a sum of Rs. 18,702,310, and the first phase will be completed in a year or so. A sum of Rs. 17,716,850 had been spent up to April 1959. Now, only the administrative block, the women students' hostel and the outpatients' block remain to be constructed. The Nishtar Medical College with its most modern and up-to-date buildings, equipment and teaching facilities has been described by foreign observers as the best of its kind in Asia.

Although it has been functioning for the last ten years, the Fatima Jinnah Medical College for Women, Lahore, had no hostel so far. The present government took immediate notice of this deficiency, and a sum of Rs. 735,000 has been sanctioned towards this work. Another sum of Rs. 80,338 has been sanctioned for the construction of a cold-storage in the basement of the Anatomy Department of this college. An outpatients' department in the Sir Ganga Ram Hospital, Lahore, is under construction. A stand-by tube-well is also being installed.

Also being built are a hostel and an additional block for the Institute of Hygiene and Preventive Medicine, Lahore. This institute provides teaching facilities to the students of the Diploma in Public Health and the Sanitary Inspectors' class.

The building for the Institute of Radiology has also been started in the Mayo Hospital, Lahore. This institute, on which Rs. 100,000 will be spent this year, will be the first of its kind in the country and will enlarge the scope of X-ray facilities and serve to train under-graduate and post-graduate students of the King Edward Medical College, Lahore.

New Equipment

A sum of Rs. 420,000 was spent during the year on the purchase of new equipment for hospitals and dispensaries in the Hyderabad division.

An X-ray plant is being purchased for the Mayo Hospital, Lahore, at a cost of Rs. 295,000 and a new laundry plant added at a cost of Rs. 185,600.

Scholarships

Scholarships are awarded for various types of technical studies by the Health Department every year. During 1958-59, a sum of Rs. 665,240 was given away by way of stipends and scholarships, while Rs. 872,340 have been allocated for the purpose during the current year.

Grants-in-Aid

Recurring and non-recurring grants-in-aid amounting to Rs. 1,028,220 were given to hospitals and dispensaries during the year 1958-59. A sum of Rs. 815,320 has been allocated on this

account for the year 1959-60. These grants are given to private and missionary hospitals in Lahore, Bannu, Sialkot, Rawalpindi and to hospitals run by the Pakistan Red Cross Society and local bodies.

Grants for purposes of health amounted to Rs. 1,827,823 during last year, and Rs. 2,443,060 are to be given away during the current year. Rupees 1,000,000 were given by the central government and spent to finance urban and rural sanitary schemes to develop the economy of the rural areas.

Anti-Adulteration Drive

The Department of Health has been faced with the acute problem of adulteration in the articles of food. In all, 15,285 samples of suspected adulterated food-stuffs were seized by the Food Inspectors during the year and a total fine of Rs. 183,995 realised from persons convicted by the courts in 1,788 cases decided by them. Prison sentences were awarded in 151 cases.

Woman and Child Health

There are 265 maternity and child welfare centres in the province. Another ten will be opened in the Multan region during the current year. A total sum of Rs. 849,620 was spent on these centres last year, while Rs. 1,216,750 have been sanctioned for the year 1959-60. This includes 90 scholarships to lady health visitors, nurse *dais*, etc.

In order to provide training to girl students of the southern zone in the health visitors' course, a new Public Health Nursing School will be opened at Hyderabad in August 1959. The UNICEF has agreed to provide teaching equipment, transport, etc., for this school.

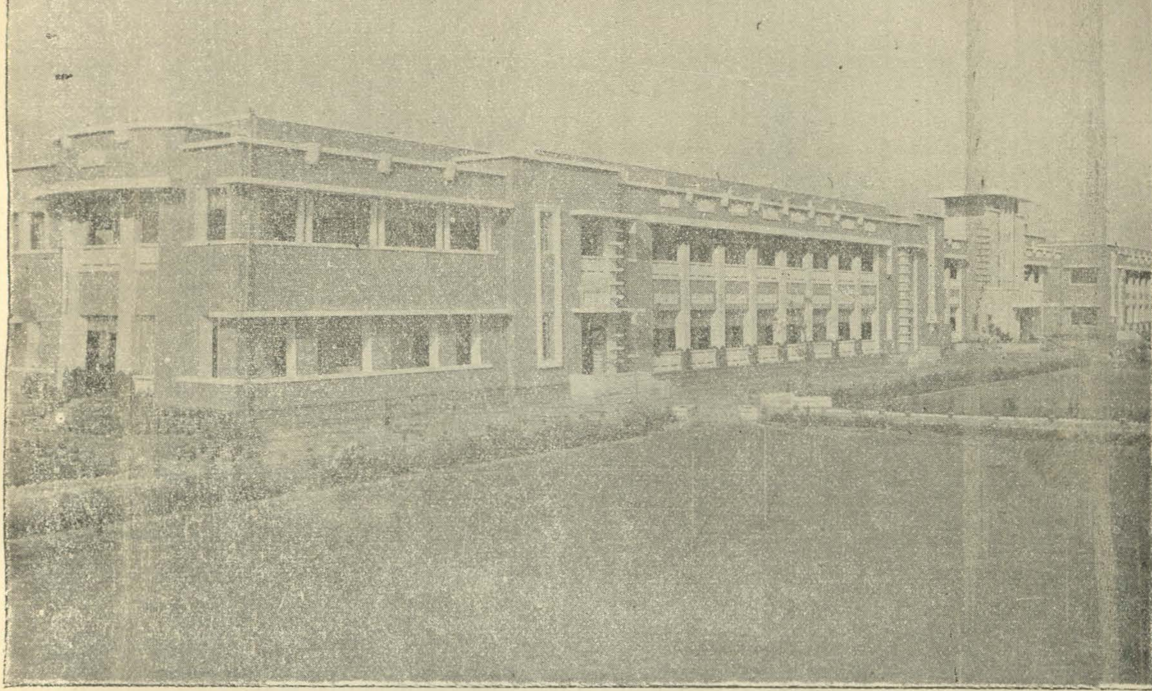
The Second Five-Year Plan of the country includes a proposal to establish 150 primary health centres and 450 sub-centres in the province.

Nursing Services

In order to overcome the shortage of trained nursing staff, the Lady Reading Hospital, Peshawar, has been approved as a training institution. The number of institutions for training nurses has, therefore, gone up to eight now. These trained 120 nurses and 100 midwives during the past year. Two nurses were sent to Great Britain during the year for training in post-graduate nursing, and four were sent to the Lebanon for training in public health nursing. In addition, five nurses were sent to Karachi for obtaining the Sister Tutor Diploma from the Post-Graduate College of Nursing there.

Family Planning

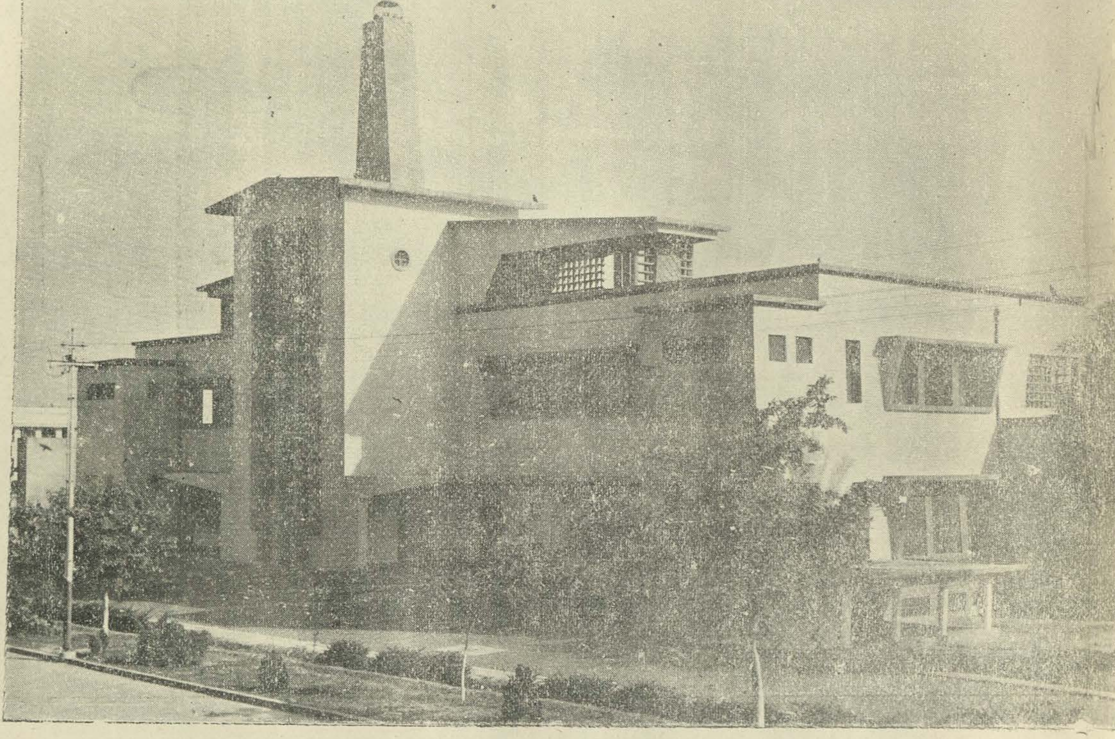
To check the alarming growth of population, the provincial Health Department imparted special training to about 50 lady doctors in the field of family planning during the year. For the present, family planning work is being undertaken in a few maternity and child welfare centres



The nurses home attached to the Nishtar Medical College Hospital in Multan

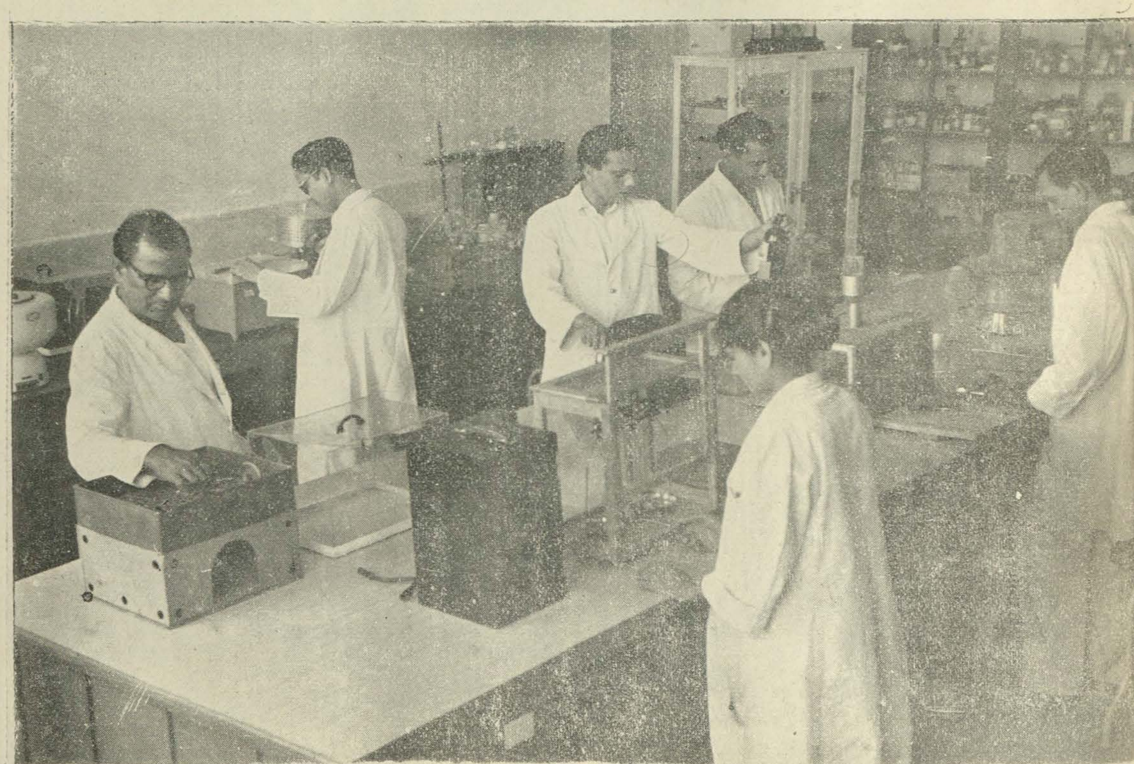
The hospital for Government servants is under construction in Lahore





This impressive building is the kitchen of the Nishtar Medical College Hospital, Multan

Research and experimentation play an important part in the activities of the Nishtar Medical College students. Here a batch of students is seen engaged on this work in the college laboratory



in the bigger towns. The scheme is, however, being looked into and its expansion is imminent.

Anti-Tuberculosis Measures

A new 136-bed T. B. sanatorium has been started at Kotri in the Hyderabad division, where 20 beds have been reserved for government servants and their families. A new block will soon be added to the 120-bed Gulab Devi Hospital at Lahore. Besides, 100 beds have been reserved for T. B. patients at the Lahore General Hospital, and another 200 are planned to be added.

With the help of the WHO and UNICEF, it is proposed to carry out a T. B. prevalence survey in West Pakistan. The BCG campaign is also showing good results. The three units allocated to the various regions in the province tested 2,466,807 persons and vaccinated 916,404 during the year.

Fighting Malaria

Earnest efforts are being made by the Health Department to fight the malaria menace in the province, and Rs. 1,243,550 were spent on these operations during the year 1958-59. Infectious and communicable diseases like hookworm, typhus, leprosy and venereal diseases remained well under control during the year.

Sanitary Board

Grants-in-aid amounting to Rs. 593,610 were sanctioned by the West Pakistan Sanitary Board during 1958-59 to various local bodies for the execution of their sanitation projects. A sum of Rs. 110,000 was sanctioned by the government to be shared equally by the Khairpur and Hyderabad divisions for sanitary schemes.

Drug Control

About 2,000 shops of chemists were inspected and 51 cases of the violation of Drugs Rules, 1958, were detected during the year. Licences of five drug manufacturers were cancelled on account of infringement of the rules.

Flood Relief Work

A master plan has been prepared by the Health Department in accordance with which relief measures are put into operation when floods hit the province. The floods of July 1959 badly affected more than a dozen districts, but owing to the prompt handling of the situation by the department, there was no report of any outbreak of disease from any flood-affected area.

Anti-malaria and sulpha drugs, as also insecticides, were rushed to all the localities hit by the floods, and a mass drive of preventive inoculation was started. All wells in the rural areas were disinfected and chlorinated. Sufficient quantities of drugs and medicines and adequate medical staff was made available to the Health Officers of the affected districts.

Red Cross Activities

The West Pakistan Provincial Branch of the Pakistan Red Cross Society is maintaining one T. B. hospital, two T. B. clinics, four maternity hospitals, one training centre for nurses and midwives, 32 child welfare centres and eight sub-centres in the province. These are being run on a permanent footing, while the Red Cross Society keeps on rendering medical and other necessary assistance in emergencies like floods, fires, epidemics, earthquakes and famines.

During the year 1958-59 the Red Cross distributed about Rs. 600,000 worth of relief supplies among flood victims. It also donated a sum of Rs. 100,000 to the Gulab Devi T. B. Hospital in Lahore for the purchase of an X-ray plant.

In November 1958, a blood donor service was started in the society's headquarters at Lahore, and 40 specimens of blood were secured during the year. After grouping and carrying out tests in the society's own laboratories, these specimens were donated to the Sir Ganga Ram Hospital, the Mayo Hospital and the United Christian Hospital, Lahore.

The district branches of the society have set apart substantial amounts to give monetary assistance to the T.B. patients to carry on their follow-up treatment after discharge from hospitals and sanatoria.

The society is opening a therapy centre in the T. B. wing of the military hospital at Kakul. This will help the patients to earn their livelihood after discharge. A nurses' holiday home is also being started in Murree. Family planning is being introduced in all the Red Cross child welfare centres, and the Lady Health Visitors deputed at these centres have alreary attended a training course recently held at Rawalpindi.

The West Pakistan Government gives an annual grant-in-aid of Rs. 27,300 to the Provincial Branch of the Society for its Talagang and Pindigheb hospitals, its maternity hospital at Lahore and for other health purposes. The St. John Ambulance Association also receives a grant of Rs. 3,000 annually.

FOOD AND CIVIL SUPPLIES

Food has been problem number one in Pakistan for many years now. The western wing of the country which at the time of independence was called the granary of Pakistan, gradually became a food importing area due to a number of factors which included low production, hoarding by profiteers and cultivators, and large-scale smuggling of foodgrains across the borders. These nefarious activities received a sudden check on the advent of the new regime which has already achieved several remarkable improvements in the food position and is pushing ahead various steps necessary for fully solving this problem. In fact the Second Five-Year Plan aims at achieving self-sufficiency in the matter of food, and the government is determined to see that this ideal materialises.

Five days after the imposition of martial law, the Anti-Hoarding (Foodgrains) Order was promulgated which rendered hoarding an offence punishable with death. This and other orders, particularly Martial Law Regulation No. 21 which is still in force, gave a death-blow to hoarders, smugglers, black-marketeers and other such anti-social elements. The result was that great quantities of hidden foodgrains came out in the open market and were offered to the Civil Supplies authorities. In fact, the flow was so heavy that the government had to enhance the money earmaked for its purchase during 1958-59 to Rs. 621,882,000 as against the original budget provision of Rs. 190,559,000.

One of the important achievements of the new regime is an improvement in the procurement of foodgrains. In 1958-59, the wheat procurement operations yielded satisfactory results, and the government was able to procure 360,000 tons of wheat as against 250,000 tons procured during the previous year. Most of this quantity was procured after October 1958, and as stated earlier the Anti-Hoarding (Foodgrains) Order 1958 promulgated by the President had much to do to promote the free flow of grain in the markets.

In the food year starting from May 1959, the first under the new regime, procurement is proceeding even more satisfactorily. Till 10th August more than 450,000 tons of wheat have been procured. A special feature this year is that procurement is being made without resorting to any coercive measures as in the past. The two factors contributing to good procurement are that the anti-smuggling measures have become effective for the first time, and wheat production has increased with the intensification of the government's grow-more-food campaign. In view of the importance of these

operations they were closely supervised by the President himself.

A glance at the figures of wheat procurement at the time of independence, at integration of West Pakistan and during the period under review will show how things have improved over the previous years by the efforts of the new regime. In 1947-48, only 228,000 tons of wheat could be procured. In 1955-56, the figure was even less, *i.e.*, 175,000 tons. The past year saw 358,000 tons of wheat procured, whereas during the current year (from 1st May to 10th August) the record figure of 450,000 tons has been reached—a remarkable achievement by any standards.

Rice Procurement

The procurement campaign for rice in 1958-59 was also satisfactory. The government procured 102,000 tons in the Lahore region and 203,000 tons of *kangni* and *joshi* rice in the Hyderabad and Khairpur divisions. *Kangni* and *joshi* varieties were supplied to East Pakistan and the federal area of Karachi, and thus considerable foreign exchange, otherwise required for import of rice for these regions, was saved. Rice procured in the Lahore region is meant for export which is in progress and is expected to earn substantial foreign exchange for the country. Both in the Lahore and Hyderabad regions, procurement was much above the targets fixed which were 75,000 tons and 130,000 tons respectively.

Less quantities of wheat are required to be imported now due to the above-mentioned measures of the government. During the very first year of the assumption of power by the new regime, notable reduction in imports was made. Efforts for scaling them down further will continue till self-sufficiency in food is achieved.

Provisioning

Provisioning was heavily increased during the winter of 1959. It has been extended to a number of more towns, and the quota at some places has been substantially raised. A quantity of above 650,000 tons of wheat and wheat *atta* was distributed from the provincial reserve in West Pakistan, as compared to the issue of about 550,000 tons during 1957-58. The subsidised issue price of wheat was continued at the rate of Rs. 12-4-0 in spite of the heavy strains thus caused on the provincial exchequer.

Instructions for more effective control of wheat milling were issued in the form of the West Pakistan Flour Mills (Control) Order of 1959. Severe action has been taken against some mills with the result that the quality of *atta* emanating from these sources has visibly improved. With a view to meeting the requirements of those who prefer to take wheat rather than *atta* from the ration depots, the government has arranged to make wheat available at all depots, and now consumers have the option to purchase wheat or *atta* as they like.

In order to prevent wasteful and ostentatious consumption of food at feast and parties, the West Pakistan Food Economy Order of 1958 was issued and has been enforced strictly for the first time.

Storage

Shortage of storage accommodation for foodgrains has been felt in the province since the new regime took over. Lately, some of the foodgrains have been destroyed or rendered unfit for want of proper shelter and protection. The former regime left West Pakistan with inadequate storing space of 365,000 tons only. The government is now quickly constructing additional accommodat ion for 135,000 tons, while more storage is proposed to be added during the Second Five-Year Plan period.

Price Control

One of the very first acts of the new regime was to take steps for controlling and reducing prices of articles essential for the life, the community, and for dealing severely with anti-social dealing in these articles, such as black-marketing and hoarding. In the beginning, several orders were issued under martial law. These orders were eventually amended and consolidated into Martial Law Regulation No. 42, under which articles essential for the common man and for national economy are controlled at present. The enforcement of these orders is supervised by Deputy Commissioners with the help of officials of the Food and Police departments. Several police stations in the districts have been constituted as special report centres for receiving complaints of offences of hoarding and black-marketing. Special staff of the Food Department has been earmarked for maintaining vigilance and taking prompt action against offenders.

In April 1958, the traders were warned by the government that if they did not eliminate corrupt elements from their distribution system, the latter would step in to appoint distributors. It was explained that importers and producers would be held responsible for malpractices of their distributors. They were also asked to publicise the names of their agents, so that consumers could get in touch with them for the supply of necessary articles. Further, the chambers of commerce and other established trade bodies were asked to nominate panels of their members to which members of the public could address their grievances for enquiry, redress and other action. At the same time, the government is making efforts to build consumer resistance against temptation to unessential purchases and against payment of more than the controlled prices.

Control over distribution and prices of soft coke and hard coke was continued to ensure supplies to industrialists and domestic and other consumers.

Cement and Bicycles

In March 1959, the government took over control of the distribution of

cement and bicycles to provide relief to the public. Nearly 56,460 tons of cement were distributed till August 1959. Of these, 16,819 tons were allocated to industrialists and the remainder to the general public One thousand one hundred and twenty foreign bicycles were also distributed during the period from March to August 1959.

FISHERIES

The piscicultural resources of the province present vast possibilities for supplementing the food production, as some of the indigenous fish species are the finiest available anywhere. This prompted the government to set up a separate Fisheries Department last year, and in view of the important role it can play in the food economy of the province its budgetary allocation during the current year has been more than doubled. From Rs. 378,000 in 1957-58 it has now been raised to Rs. 745,000.

The department has been reorganised, and additional posts have been sanctioned in order to cope with its increasing responsibilities. A new section has been created to look after fisheries development in the Hyderabad division. The production of fish has gone up three times since independence and the income raised to nearly five times. The number of fish farms is now 256, as compared to 18 in 1947-48.

The present annual fish production in the whole of West Pakistan is 440,000 maunds. It is anticipated that by the end of year this figure will record a rise of some 15,000 maunds as a result of stocking of ponds, lakes, tanks and streams.

Schemes

Realising the utility of waste waters which are both enormous and extensive in the province, the government sanctioned the following schemes which are now under implementation:—

1. Increase in fish production.
2. Development of fisheries in the Peshawar division.
3. Development of fisheries in the Rawalpindi division.
4. Scheme for fishery development at the Manchhar lake and other *dhands* in the Dadu district.
5. Investigation into pollution of the Sohan river near Rawalpindi.
6. Survey of fresh water resources in West Pakistan.
7. Survey of fisheries in the Bahawalpur, Khairpur and Hyderabad divisions.
8. Setting up of a fisheries training centre.

The department has formulated a grow-more-fish scheme and the government has provided Rs. 70,000 for purchase of two lorries and a jeep in order to facilitate quick transport and disposal of the fish. A fish-seed supply centre is being opened at a cost of Rs. 17,000. Work on the Manchhar lake and the nearby ponds and rivulets is being intensified. It is proposed to construct fishing huts at Turbela

in the Hazara district, which is said to be the best fishing point in the Peshawar division and is very popular with tourists.

New Fish Farms

Near Peshawar city a first-class fish-hatchery has been established in Panj Tirath from where fry are taken to fish farms and stocked there. This has resulted in declaring open the Kheshki reservior to anglers, a step which is yielding good results. Rules have been framed for shortly declaring open two more fish farms namely: Gorak Tibi and Panj Tirath Lake. Apart from this, a 4-acre tank at the Warsak Dam site has also been stocked.

Special attention is being paid to the excellent trout found in the Kaghan Valley where a whole-time trout culturist has been appointed to look after the breeding of brown trout in the Shinu hatchery and to control the trout in the river and the streams and lakes. Rupees 23,000 have been provided for this purpose for the current year. Incidentally, these waters were taken over by the Fisheries Department from the Forest Department only in December 1958.

The department has also utilised the 40-acre tanks in the Ayub National Park in Rawalpindi for fish farming. Netting in one of these tanks revealed that fish had grown up to 8 lbs. in weight. An extensive survey in the districts of Rawalpindi, Jhelum, Gujrat and Sargodha has resulted in the selection of 63 waters, most important of which is the one in Sohawa, which has been stocked with 2,000 fish fry.

A mahaseer fry-collecting centre has been located in Allah Yar Dhand in the Hyderabad division. A preliminary survey of the Manchhar lake was conducted in regard to the extent of water area, presence of water plants, varieties of fish, dissolved salts in water, methods of fishing, etc. The lake is about 20 miles long, 3 to 4 miles wide, and 4 to 6 deep. Fishing rights for the year 1958-59 have been auctioned for Rs. 21,000. The lake presents immense possibilities for development as a source of fish, and the Fisheries Department officer posted there is already at work to get the best out of the waters where already some 2,500 fishermen operate normally.

In the Hyderabad division the department has also undertaken work in respect of productivity in the Makli, Kala-Kot, Kalri, Hedro and Halleji lakes. A survey of spawning of carp in the Indus between Kotri and Jamshoro is under way, and the study of aquatic plants found in ponds and tanks around Hyderabad and Kotri is in hand.

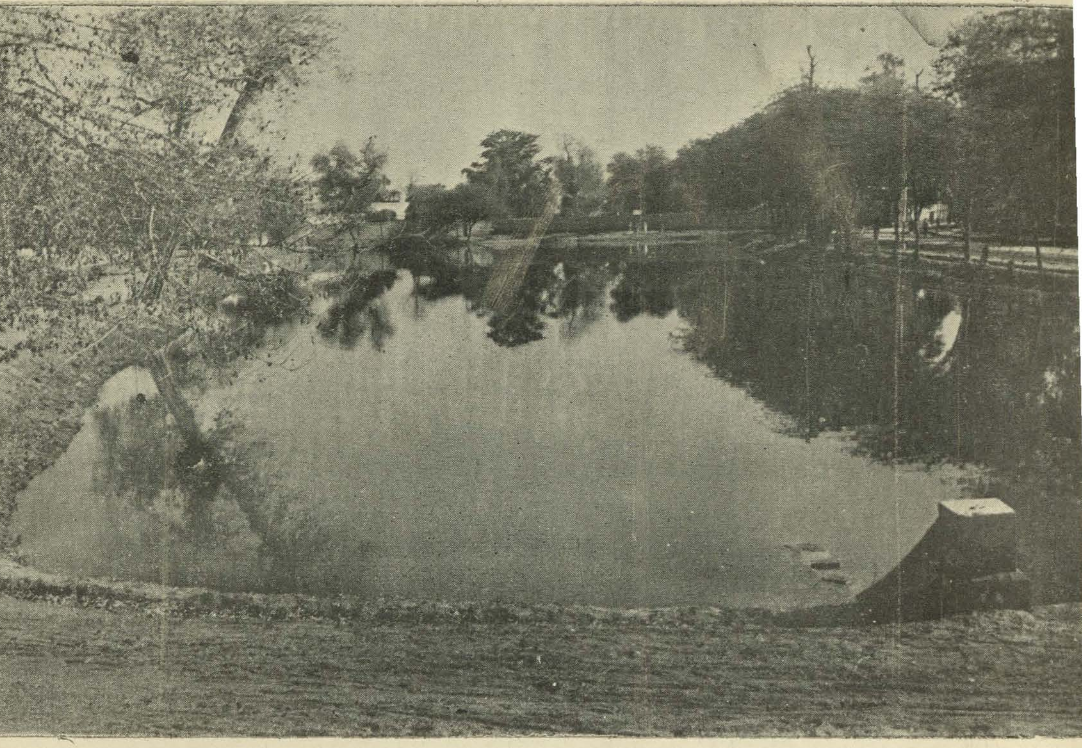
One of the most important problems in the southern zone is that of Palla fisheries. This has arisen out of the construction of the Ghulam Muhammad Barrage on the Indus at Kotri which was completed in 1955. Palla in large numbers migrate every year from the



Netting in progress in the fish tank at Hiran Minar in Sheikhupura District. This is a favourite fishing and angling resort

Stocking of fingerlings is done in special cans for transportation to selected tanks





This tank in Bahawalpur town has been set apart for fish culture

Food for the famous trout in Kaghan river is being studied by Fisheries Department officials



sea and the Indus estuary up the river for breeding. These are extensively caught from February to August every year. Formerly the fish used to ascend to the Sukkur Barrage where its course upstream was checked by the weir. Now the Ghulam Muhammad Barrage serves as a barrier and the fish is caught only up to Jamshoro. The length of the river between Jamshoro and Sukkur has thus been lost to fishing. Two fish passes were provided in the Ghulam Muhammad Barrage, but these are unsuccessful and the Palla is not able to negotiate them. A detailed study of the fish ladders was undertaken, but unfortunately it has not yet been found possible to make the Palla use these passes.

In co-operation with Village-AID agencies and *panchayats* the Fisheries Department has received details of 1,462 village tanks covering 1,893 acres of water in the various Village-AID development areas. The *panchayat* authorities in the Lahore, Gujranwala, Sargodha and Gujrat districts likewise intimated that 19 tanks covering 65 acres could be utilised. To start with, tanks covering 53 acres were selected for fish propagation. A scrutiny of the 1,462 village tanks and ponds is being made.

Aquariums

Three aquariums have recently been established. These are at Panj Tirath, Peshawar; the Ayub National Park, Rawalpindi; and the Fisheries Training Centre near Lahore, where live foreign and local varieties of fish are kept for educational and breeding purposes. The department has helped to train 65 Village-AID workers and 6 Assistant Wardens of Fisheries in the art and practice of fish culture and allied subjects. The availability of trained technical staff is, however, still a problem to which much of the attention of the department is presently being devoted.

CO-OPERATIVE MOVEMENT

Quite a few steps of fundamental importance were taken during the past year to put the different sectors of the co-operative movement on a sound footing.

It had been felt for a long time that the co-operative law, introduced over fifty years ago, was out of date and needed revision; the integration of units in West Pakistan, having different laws in operation made the revision and unification all the more urgent. But the governments in office prior to the imposition of martial law made only half-hearted and haphazard efforts in that direction, with the result that they could not bring about the desired change.

It is a tribute to the new regime's consciousness of the long-neglected and pressing problems that immediately on assumption of office it appointed a committee charged with the function of going into the matter and making recommendations to the Governor's Advisory Council. The committee's proposals have been endorsed by the council and the departments concerned. They now await the approval of the central government; for certain portions of the proposed law pertain to it. After the enforcement of the law, which is expected shortly, the Co-operative Department will be able to develop societies all over the province on a uniform basis, and carry out reforms and initiate schemes that could not be introduced earlier because of lack of provisions in the outdated law governing the system.

Credit

For all the other activities—industrial farming, consumer stores, etc.—to which it has lent itself during the past 50 years of its evolution in West Pakistan, the movement retains to this day rural credit as its primary and principal function. And rightly so, keeping in view the overwhelmingly agricultural economy of the province. There are at present 12,064 (11,456 of them rural) primary credit societies, having a membership of 382,000.

Experience has proved that the single-village primary society, be its utility unquestioned, was not strong enough to meet all the credit requirements of the poor cultivator, since its membership ranges from 30 to 35 and its average loaning capacity per year is around Rs. 4,000—manifestly a meagre sum. Therefore, a scheme directed at establishing large-sized financially-sound co-operatives was initiated two years ago. The scheme is being implemented in the Village-AID development areas in conjunction with the Village-AID Department. A society has a number

of villages as its area of operation, a minimum membership of 100, a share capital of about Rs. 10,000 contributed by the members, and a loaning capacity of Rs. 100,000. An amount equal to the share capital is invested by the government, subject to a maximum of Rs. 10,000, so as to strengthen the finances of the society. The government participation is channelised through the apex banks; money is deposited in the banks on the condition that they allow an equal sum to flow down to the capital of the society, and by now a sum of Rs. 1,500,000 has been invested by the government.

Today the province has 174 such societies, having a membership of 19,600. They advanced loans during the past year to the tune of Rs. 897,000. By making available larger sums, these societies enable the farmer to instal tube-wells and purchase costly modern implements of agriculture. A hundred more societies will be organised during the current financial year. According to the Second Five-Year Plan beginning from the next year, 100 societies will be formed annually; the government will make a total contribution of Rs. 5,000,000.

Another measure calculated to improve the existing conditions of small credit societies is that a part-time paid secretary will be provided by the government for some societies for two years to look after their organizational matters and put them on sound foundations. This will involve an expenditure of Rs. 540,000 by 1964-65. The plan includes the establishment of 2,000 more societies every year in villages that are still outside the pale of the co-operative movement.

All these steps are designed to increase substantially the amount of rural credit the primary societies advance. In 1957-58 the loans rose to Rs. 31,500,000 from Rs. 20,000,000 in 1956-57. This amount will shoot up to Rs. 220,000,000 in 1964-65, registering a yearly increase of Rs. 30,000,000.

Another Step Forward

In July this year an issue that evaded solution for 12 years was settled. The Punjab Provincial Co-operative Bank, the movement's biggest financing institution in the province, conducted its business in the whole of undivided Punjab. On independence the position became anomalous and called for a change in the bye-laws, but no such step was taken. The defective nature of the bye-laws also prevented the general meeting to assemble and elect a new managing committee. Now the bye-laws have been revised not only to remove these flaws but also to extend the area of operation of the bank to the entire province of West Pakistan. Election to the managing committee will be held in the near future.

The Punjab Provincial Co-operative Bank advanced loans amounting to Rs. 65·5 million during 1958-59. Similarly, the other apex banks, viz. the Frontier Co-operative Bank and

the Sind Provincial Co-operative Bank respectively loaned Rs. 97 million and Rs. 51 million.

Marketing

Linked with credit is the marketing problem. It is universally agreed that in a poor agricultural economy the cultivator faces the problem of marketing his produce. It is also to the interest of the credit societies to arrange the disposal so that there is no difficulty in adjusting their accounts. With this object in view it is planned to set up 100 marketing societies during the next five years, each having 20 to 30 credit societies as its members.

The intention is to build the structure of marketing on a co-operative basis right from the very base, and forge a definite link between credit and marketing—which fact is distressingly non-existent in the 72 commission shops operating in the province; for co-operatives sell their produce to whoever they like and the shops deal with anyone they prefer.

Farming

Co-operative farming, introduced after independence mainly to rehabilitate displaced persons, has met with creditable success. A block of 500 acres or more was allotted to a society in the colony districts of the former Punjab, which sub-allotted 12½ acres to a member for cultivation under a common cropping plan. The farmer gives 40% of the produce to the society which utilises the amount for the payment of government dues and carrying out welfare schemes.

A glance at the range of its activities will prove that the word farming is somewhat misleading. The society acts as a credit co-operative giving loans to its members; as a better farming society introducing improved methods of agriculture; as a marketing unit selling the produce; and as a better living society providing facilities for education and medical aid. Under a housing plan, a large number of societies have built extremely good model houses in place of dingy and unhygienic hovels; schools and adult literacy centres are fast eliminating illiteracy; recreation centres and youth clubs help in maintaining good health; and medical aid by dispensaries has considerably reduced the number and intensity of epidemics.

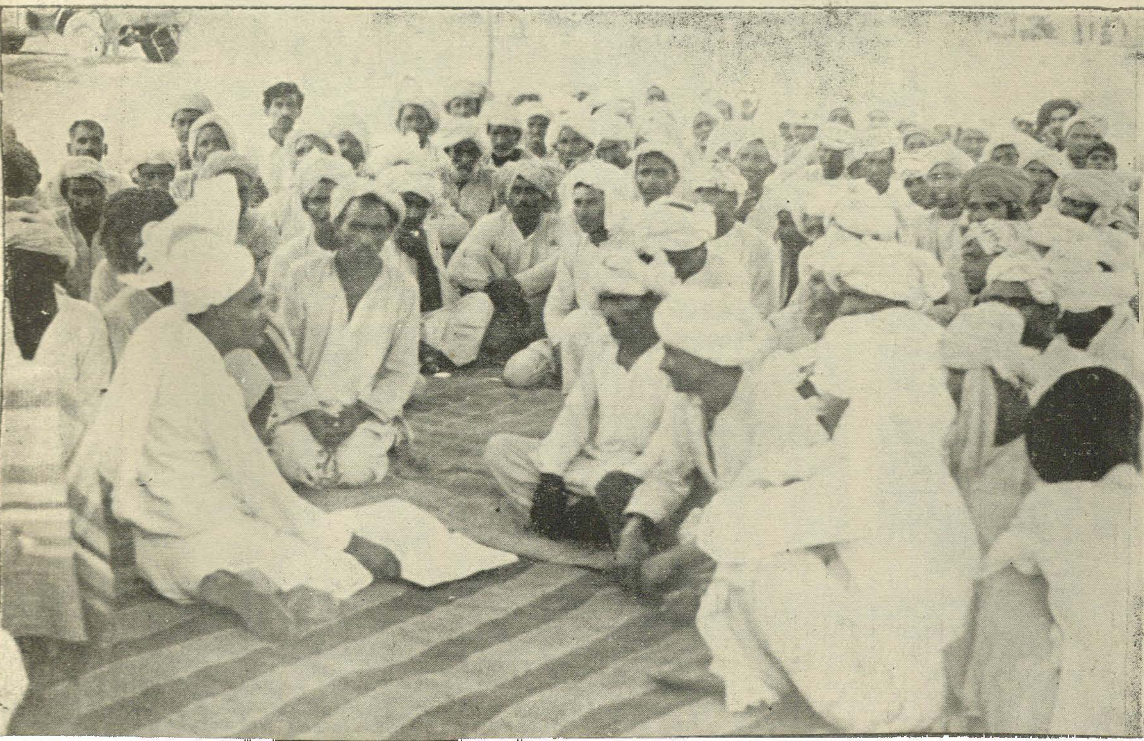
Farming societies functioning in the Multan and Montgomery districts number 129. They have so far distributed implements worth Rs. 300,000 to their members. During 1958-59, more than 24,230 acres of virgin land were brought under the plough.

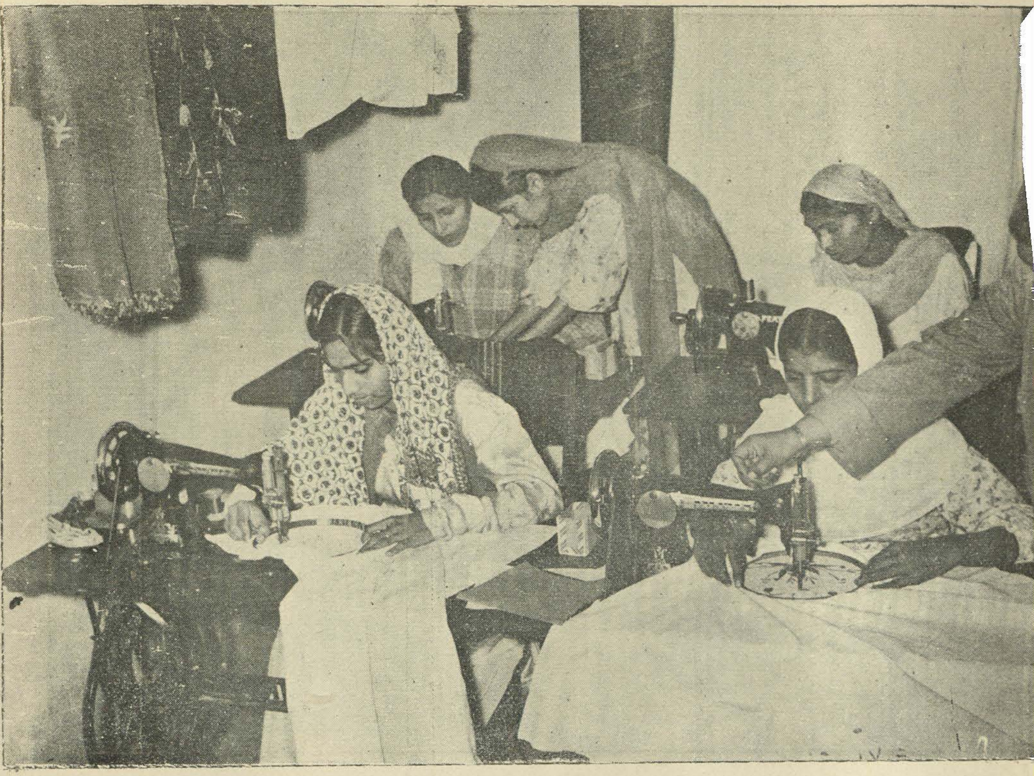
It is an acknowledgment of the success of the scheme that the government has recently allotted 86,000 acres in the Ghulam Muhammad Barrage area for co-operative farming. Out of this, 15,000 acres are earmarked for *haris*, 16,000 for Azad Kashmir refugees and 10,000 for East Pakistani cultivators. Two societies have already been organised.



A cultivator on a cooperative farm with a pair of bulls which won first prize in a village fair

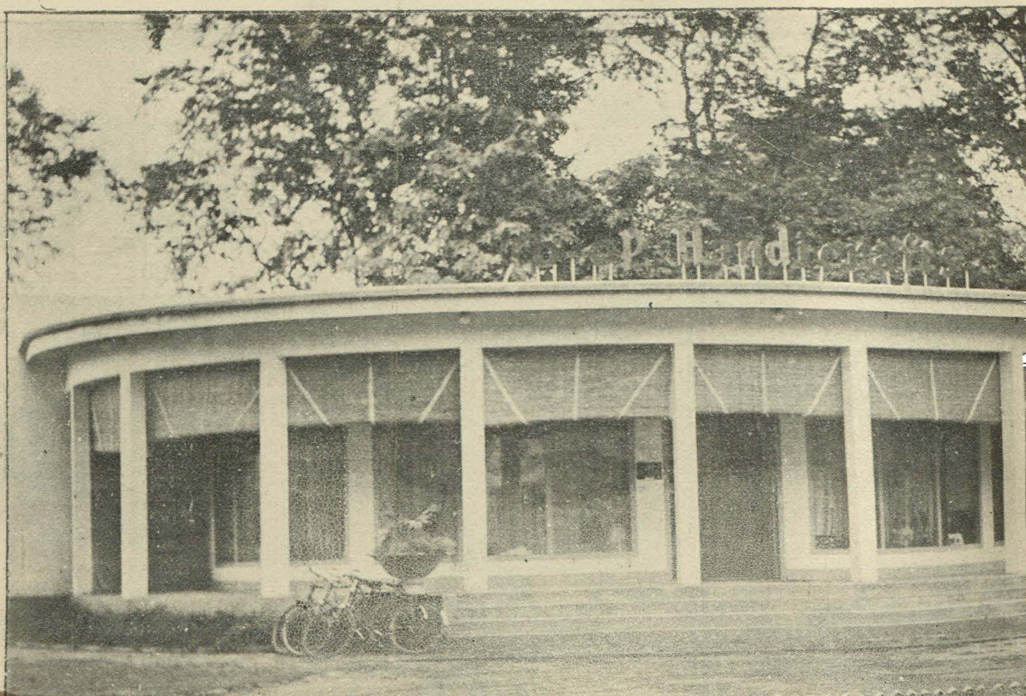
An official of the Co-operative Department discussing local problems with cooperators in a village





Women's co-operatives help indigent women to earn a respectable livelihood

This attractive show-room has been built on the Mall in Lahore to house cottage industry products of co-operatives



Industries

Although there are big industrial enterprises such as the textile mills at Khanewal and Lawrencepur and the bicycle factory near Shahdara doing their business on a co-operative basis, most of the societies are engaged in cottage industries. The department has been conscious of the fact that these industries, especially cottage industries, face enormous difficulties. Their development suffered a set-back on two grounds: (*i*) shortage of the raw material; and (*ii*) lack of proper facilities for the marketing of their finished products. With these two basic necessities missing, it could hardly be expected that industries working on a small-scale would flourish. Efforts, albeit far short of tackling the magnitude of the problem, have been afoot. In 1957, an organisation known as the Pakistan Products Co-operative Marketing Federation was established with the object of procuring raw material and marketing goods and providing guidance to the workers on the techniques and pattern of goods. In December the same year, it took first major step towards the marketing side and opened an emporium at Lahore. Only recently Co-operative Handicrafts, a sales depot, was inaugurated by the Governor on the Mall, Lahore. A design centre and a workshop are proposed to be attached to the sales depot. These two shops, run by the federation, have articles manufactured by industrial societies, ranging from crockery and metal work to bed-sheets and children's garments.

The other side of the problem, i. e. the procurement of raw material, has not been lost sight of either. The federation was given a licence for Rs. 2,500,000 and the distribution of the raw material among industrial co-operatives was done by a committee comprising representatives of the departments of Industries, Village-AID and Co-operative Societies. Another licence for Rs. 6,000,000 has also been granted to it for the use of co-operators as well as non-co-operators employed in cottage industries. These measures are bound to constitute a definite incentive to the small industrialist and help improve his lot. The total number of societies in the province is 1,328, their membership 88,165 and their working capital Rs. 11,900,000.

Training

Intelligent and persuasive type of workers are necessary for the successful implementation of a popular programme, particularly when a majority of the people whom it concerns is illiterate.

Even prior to independence, classes for co-operators were held, but there was no regular training institution. It was in 1953 that the government recognised the need for proper educational facilities and established an institute at Model Town, Lahore. Now with the increasing popularity of the movement, the government has decided to raise its status to that of a diploma college.

Since its inception, the institute has trained more than 900 personnel of different categories of the Co-operative Department. The following is the break-down of the trained staff: inspectors 176; sub-inspectors (general) 288; sub-inspectors (farming) 127; accounts clerks 198; marketing officers 4; sub-inspectresses 4; consumer stores employees 20: secretaries of development societies 71; and other officials 14. Out of these, 182 were trained last year. Recently the syllabi were revised in consultation with local as well as foreign experts.

The bye-laws of the Co-operative Union have been amended. It now caters for the whole of West Pakistan. In July this year, elections to its executive committee have also been held. This chief non-official institution working for the promotion of the movement in the province has a large staff of sub-inspectors who perform the duties of managers in the rural societies. On behalf of the Registrar of Co-operative Societies, it arranges audit of all types of societies.

Women's Co-operatives

A number of women belonging to families of meagre means have also been organised under the movement. A branch of the department in the charge of a Lady Assistant Registrar looks after this work. The activities are mainly confined to establishing thrift and industrial societies and guiding those already in existence. The thrift societies numbering 347 inculcate among their 9,227 members the habit of cutting down unnecessary expenses and laying by something for time of need. They saved a sum of Rs. 339,000 during 1958-59.

Although the number of industrial societies is comparatively small, i.e. 28, they are doing very good service in the noble task of raising the income of the poor. It is estimated that a regular member who devotes some time of her leisure, supplements her family's income to the extent of Rs. 30 to Rs. 40 a month. Notwithstanding the fact that the quality of their products is fairly good, these societies have been handicapped by a lack of proper marketing arrangement. With the opening of the sales depot, the products are expected to bring reasonable and quick returns. This will be an encouraging factor for improving the quality of goods and also induce others to join the ranks of the movement.

VILLAGE AID

The Village Agricultural and Industrial Development Programme, generally known as Village-AID, is an organised endeavour to remould rural life in keeping with the demands of a progressive and free country. This programme is planned to help the villagers in their effort to help themselves, and aims at harnessing the resources of the government and the people in a co-ordinated effort to bring rural life and practices to the over-all level of national progress.

By and large the programme is based on the principle of self-help and is forging ahead promisingly in West Pakistan. The people themselves take the initiative in all development projects and make the maximum contribution towards their implementation.

The Village-AID personnel are extension agents of the beneficent departments; they carry into the village the knowledge and modern techniques recommended by the nation-building departments, and in turn convey the problems of these rural people to the departments for guidance.

This programme, so vital for the balanced progress of the country, was started in 1953 with the assistance of the ICA of the United States. The first phase related to producing multipurpose trained village workers for the development areas. For this purpose well-equipped Village-AID training institutes were set up and development areas were gradually opened as the trained workers were made available by the institutes.

Training Institutes

There are six training institutes which fulfil the needs of the five Village-AID regions in which the province is divided. There are three double-capacity institutes at Lalamusa, Lyallpur and Peshawar which train 150 workers including 20 women workers every year; while the single-capacity institutes at Rahimyarkhan, Tando Jam and Quetta turn out 75 workers annually, including 10 women workers.

All these institutes have so far trained 1,905 workers, including 179 women workers, who are actively serving in the development areas spread over the whole of the province and who have made a name for themselves at breaking down centuries old resistance to progress by making the villager feel his own needs.

An important institution to be set up at Peshawar is the Village-AID Academy. It will start work on 1st September and train supervisors, development officers and other higher ranks of Village-AID personnel and also

afford orientation in the Village-AID concept to officers of nation-building departments and administrators of the PCS and CSP cadres. Necessary staff for the academy has already been selected and the construction work entrusted to a foreign firm.

Development Areas

There are 69 development areas in operation in West Pakistan. The normal area covers a population of 150,000 persons. It is anticipated that by the end of the First Five-Year Plan *i. e.* June 1960, the number of the development areas would go up to 88 and they would cover, roughly, 40·8% of the total rural population of the province.

In the Second Five-Year Plan it is contemplated to add another 58 development areas which would cover another 34·2% of the rural population. These figures do not include the annual rise in population.

The following pages give a brief account of the work done up to date in the various regions.

Peshawar Region

For the last five years Village-AID activities have been progressing extremely well in this region. The training institute at Peshawar turned out seven batches of workers, while two batches are under training at present.

Five new development areas were started during the past year. These are located at Nowshera, Bhakkar, Mardan, Mansehra and Hangu. During the year, 183 new village councils, 128 *chand tara* clubs for boys and 13 *chand tara* clubs for girls were organised. In order to provide proper accommodation to the school-going children 23 rooms were added to different schools.

To set up food production 11,277 maunds of artificial fertilizer were used and 506 manure pits were dug to preserve *kacha* manure. To increase the cultivable area 1,102 acres of land was protected from erosion, and 2,884 acres of *barani* land was brought under irrigation by digging wells and building bunds.

To improve the village roads 23 bridges and culverts were constructed 77,139 yards of *kacha* roads were made, and 24,824 yards of roads were repaired. The development areas are humming with all kinds of constructive activities, and the rural population is becoming conscious of its duties to itself and the nation by taking the initiative in all avenues of self-improvement.

Lahore Region

In this region Village-AID work began in 1953 with the setting up of a training institute at Qaidabad in the Thal area. In March 1954, this institute was shifted to Lalamusa in Gujrat district. Another institute started functioning at Lyallpur in 1955. Both these institutions have so far trained 1,176 male and female workers.

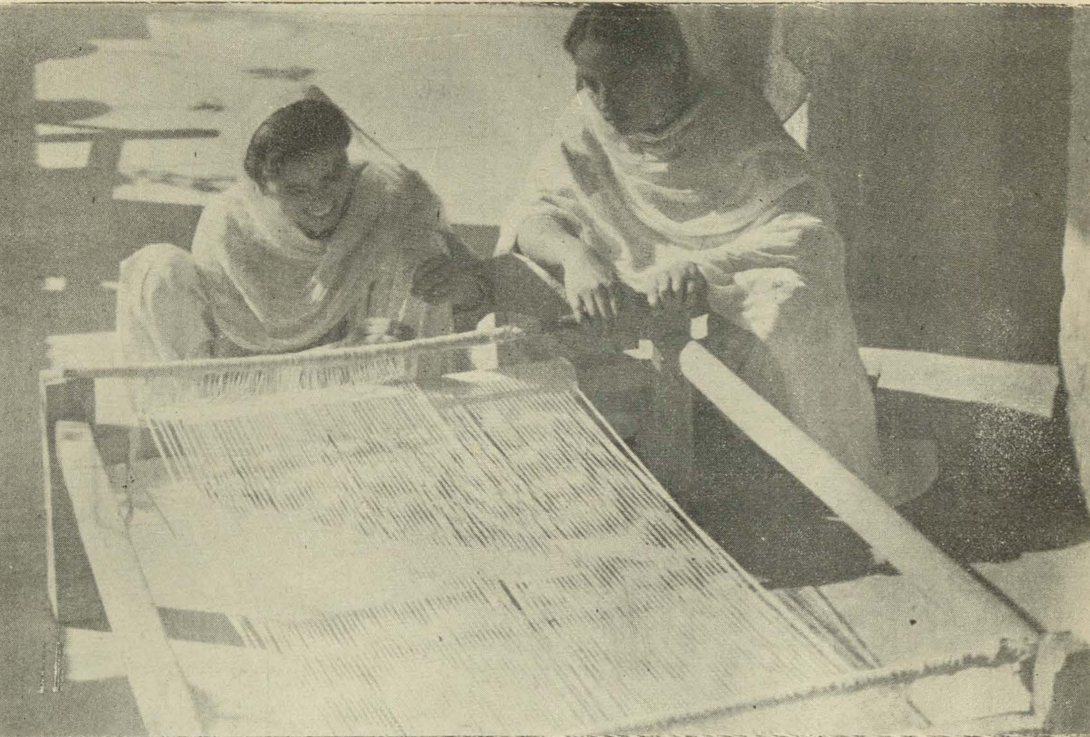
The Fundamental Educators Wing for training social educations was added to the Lalamusa institute in



A magnificent example of self-help has been the construction of hundreds of miles of channels for the Pehur Canal System in Mardan district. The work of years was done in days

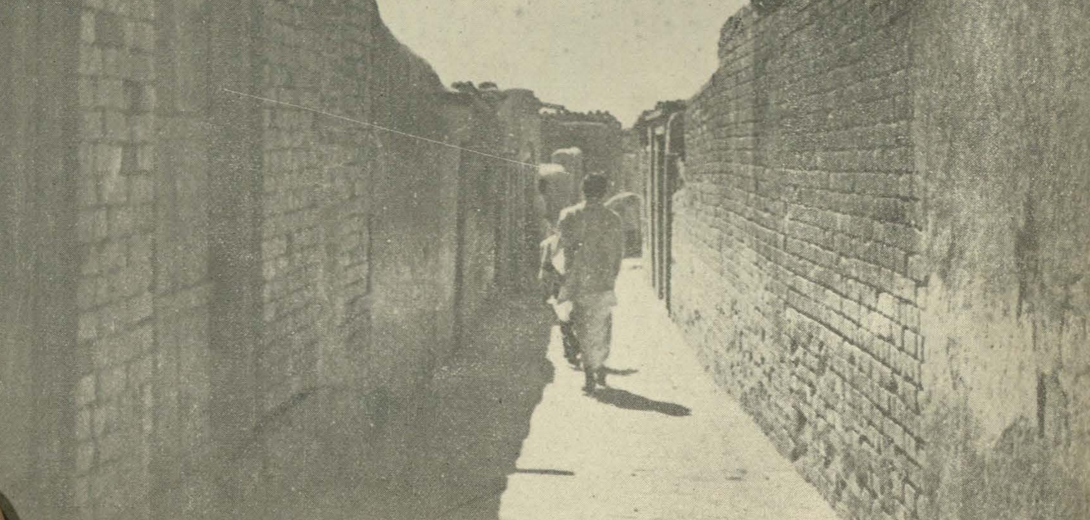
A farmer in the Peshawar region harrows his land under the guidance of a Village AID worker





A Village AID worker teaches a housewife the art of weaving a 'durree'

This street in a Gujrat village was paved by the inhabitants themselves



December 1956. Since then it has produced 200 adult education workers.

Recently, a staff training centre has been established at Lahore. This centre imparts in-service training to the development officers as well as the supervising staff in the various regions.

The Village-AID programme in this region covers 4,505 villages with a total population of 4,175,787. These figures relate to 21 development areas, as the remaining are newly established and still in the initial stage.

Fighting illiteracy is given priority in the Village-AID programme, and 95 adult education classes have been started in the region and 75 new school buildings constructed.

With the increase in the number of qualified workers, the Village-AID activities are fast expanding, and the number of development areas went up to 29 during the year.

Bahawalpur Region

The Village-AID Programme was started in Bahawalpur region in June 1954 with the setting up of a single-capacity training institute at Rahimyar-khan. This institute is catering to the need of qualified staff for the development areas. So far, eight development areas have been opened in this region. These cover 1,155 villages with a total population of 973,390.

In these development areas 35 primary schools and 100 literacy centres have been set up. In most of the villages libraries have been opened, while 200 *chand tara* clubs have been organized. About 200 miles of *kacha* link roads have been constructed or repaired, and *pacca* culverts have been provided at many places.

In the field of agriculture, 70 seed multiplication farms were set up, ammonium sulphate was used in 10,000 acres of agricultural land, 15,000 fruit plants were distributed in the development areas, and 100,000 cuttings of mulberry and *sheesham* were planted.

To eradicate illiteracy in the region, 75 new schools have been opened, 59 school buildings have been constructed or repaired, 109 education centres established and 146 libraries set up.

Every effort is being made to harness the potential power of the community for constructive end, and people are changing their basic attitude and habits more readily than expected, and adopting new methods and techniques.

Hyderabad Region

To begin with a training institute was established at Sakrand in November 1953. Later on it was shifted to Tando Jam. In this region, the Village-AID Programme spreads over 9 development areas covering 2,091 villages with a total population of 787,670. These areas are Sakrand, Tando Allahyar, Khairpur, Sakro, Johi, Dokri, Ghotki, Khandkot and Digri.

In Dokri area, where Village-AID work began in December 1953, three-fourths of the rice-growers have adopted the Japanese method of cultivation. Nearly 27,000 maunds of rice seed are sown every year at the rate of half a maund per acre. In Sakro and Tando Allahyar development areas 50% of the growers of wheat and cotton have adopted improved methods of agriculture. New crops like potatoes and onions have been introduced, and the area under them is increasing.

As a result of the new outlook which is obtaining in these areas the residents of the village Khaler Lakhmir have dug a channel about 6 miles long without involving any expense to the government. This channel will irrigate about 400 acres of land. Among other beneficial activities in the region is a donation by a local citizen of 60 acres of very fine land valued at Rs. 100,000 for an educational trust.

Marked progress was registered in the spheres of adult literacy, agriculture, animal husbandry and social-recreational activities during the year.

Quetta Reigon

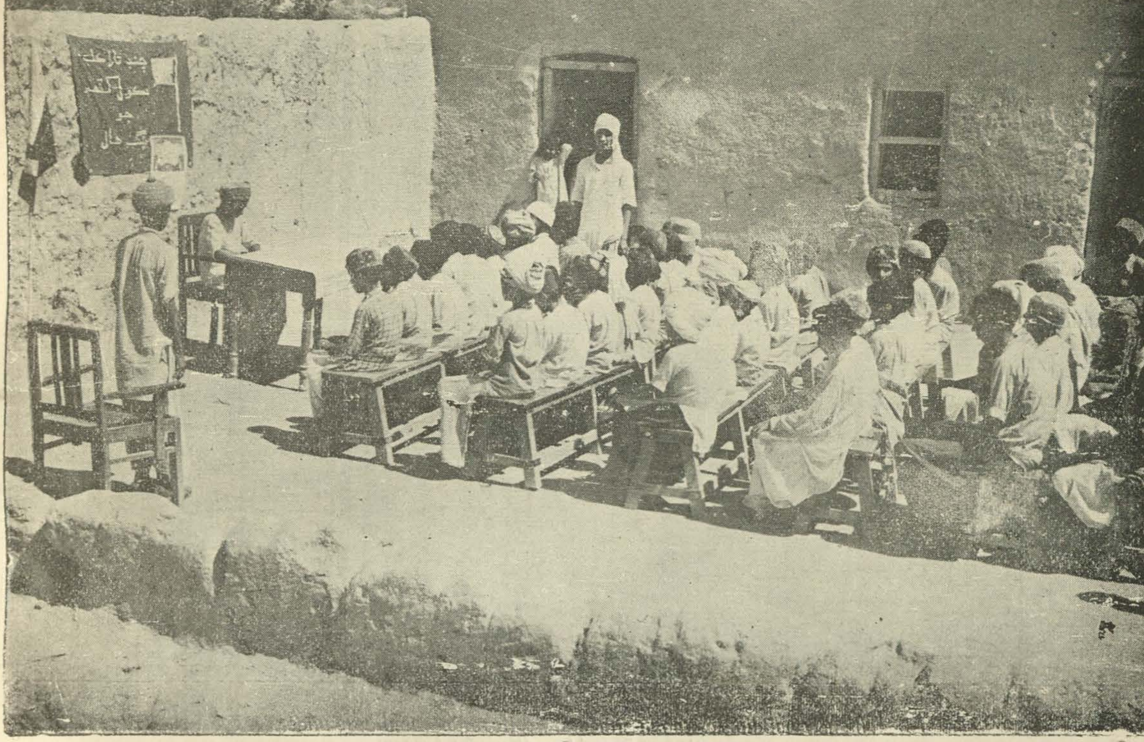
The region comprises the Quetta and Kalat divisions where the population is very orthodox and the conditions prevailing in the area most trying for the Village-AID workers. Despite various handicaps the sincere approach and characteristic perseverance of the workers have succeeded in activating the masses, and the people are increasingly taking on to improved methods of cultivation, irrigation and gardening.

The training institute of the region has passed out 205 boys and 24 girls so far, who are working in the seven development areas.

During 1958-59, the Village-AID Advisory Committee approved numerous development schemes whose total cost approximated to Rs. 1,530,000. Out of this, the village community contributed about Rs. 800,000 including labour and locally available materials.

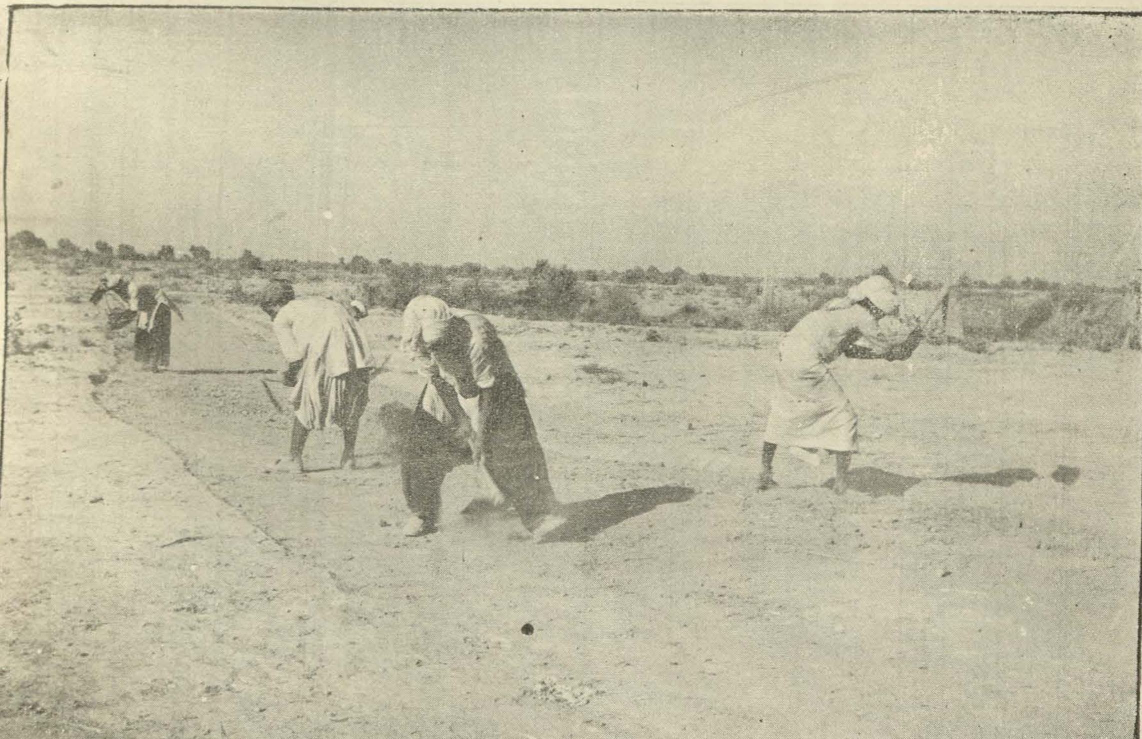
In pursuance of the grow-more-food campaign, the village workers, with the close co-operation of the Agriculture Department, persuaded the farmers to bring more and more area under cultivation. As result of their efforts about 120,000 acres of barren land were brought under the plough. About 2,000 different agricultural plots were laid out to show to the farmers the advantages of standard seeds, improved agricultural implements and chemical fertilizer. Over 30,000 bags of ammonium sulphate were purchased by farmers. Chemically-treated seed of rice, wheat and mustard was used in 14,865 acres in the area.

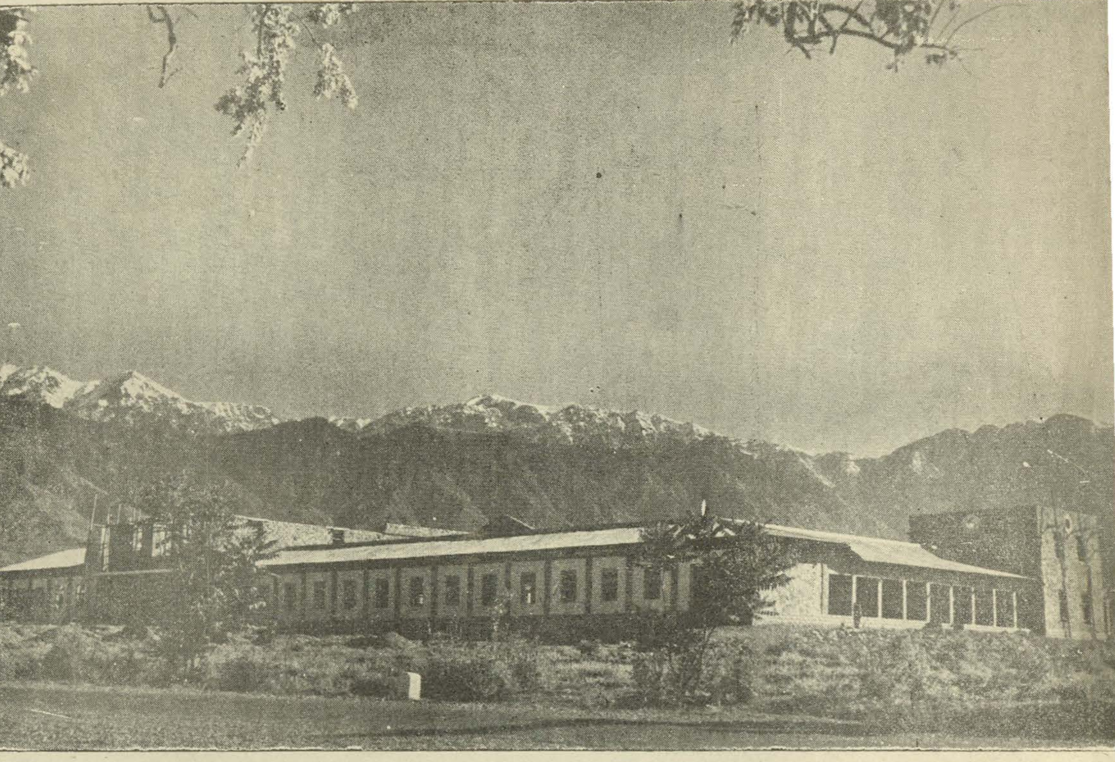
The people in general are giving up their age-old practices and becoming conscious of the advantages of self-help which has been engendered in them by the staff of Village-AID, working with a missionary zeal.



Youth organizations are promoted under Village-AID. Here a Chand Tara club meets in the open air

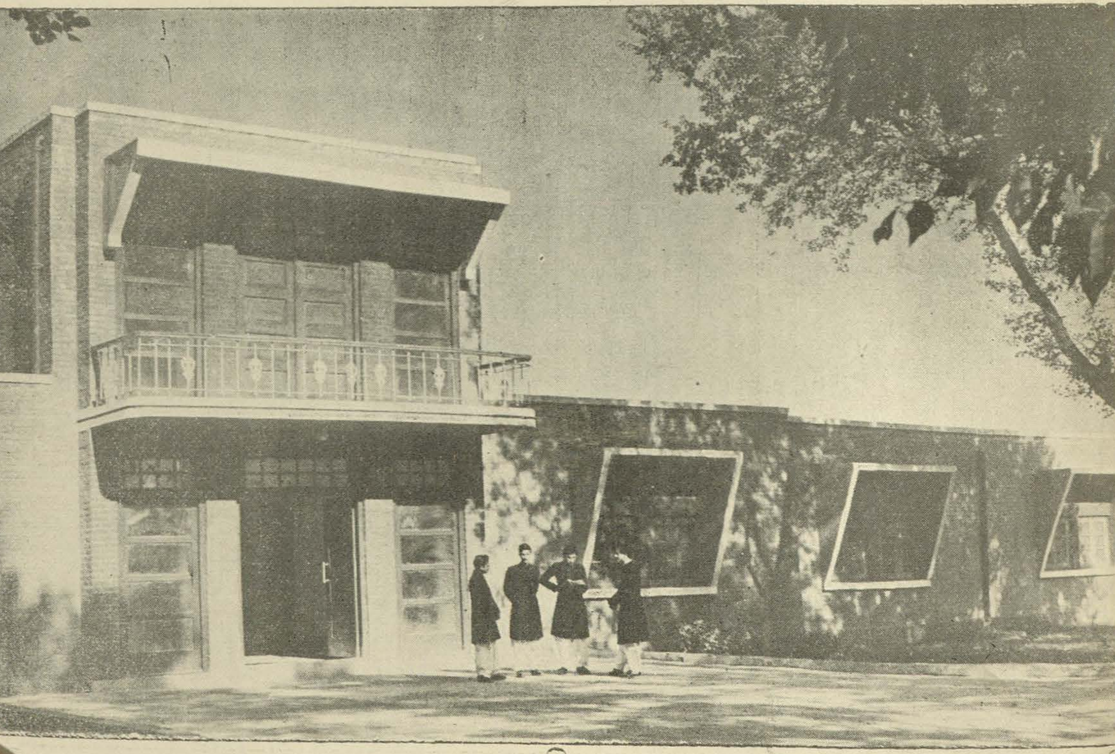
Villagers in Sakrand development area build a road for themselves





The new building of the intermediate college for tribal boys under construction at Parachinar (Kurram Agency)

The tribal students' hostel in the Islamia College at Peshawar. A hostel for tribal boys has also been built at Dera Ismail Khan



FRONTIER REGIONS

The Frontier Regions comprise the north-west frontier of West Pakistan and are inhabited by the Pathan tribesmen who won world-renown by refusing to accept the sovereignty of the British ruler before 1947. Since that year, however, when they voluntarily elected to become a part of Pakistan, they have thrown themselves wholeheartedly into the struggle for progress in the new state. Considering the handicaps of their way of life and the under-developed state of their economy, education and agriculture, it is really amazing to see how much they have forged ahead during the last twelve years. They have avidly used up all available government aid for their welfare and have proved themselves second to none in their capacity for self-improvement.

The new regime has, however, felt that much more can be done for the development of these virile people than has hitherto been achieved, and it has taken some positive measures to give practical proof of this feeling. Among the recent decisions are the abolition of the secretariat Department of Tribal Affairs, and the appointment of a very senior officer as Commissioner and Resident-in-Frontier Regions at Peshawar. This officer has been given wide powers and made responsible for close and personal supervision of all schemes aimed at the development of the tribal people and their area. A separate Frontier Regions Development Board has been constituted under his chairmanship to initiate and implement small and medium-sized schemes in the various agencies, and a special Planning Committee set up to prepare a comprehensive plan for the social and economic uplift of the area in order to achieve balanced development in the context of the Second Five-Year Plan.

Increased Budget

In view of the keenness with which the Frontier Regions are being developed in the various fields, the provincial government has enhanced their financial allocation. Last year's allocation was Rs. 28·27 million whereas in the current year's budget a sum of over Rs. 40 million has been set aside.

Administratively, there has been some readjustment. The Commissioner and Resident-in-Frontier Regions is now responsible for the administration of the Malakand agency (including the states of Dir, Swat and Chitral), the Mohmand, Khyber and Kurram agencies and the South and North Waziristan agencies. He also exercises jurisdiction over the tribal areas attached to the districts of Hazara, Peshawar,

Kohat, Bannu and Dera Ismail Khan. The agencies in the southern zone have been made the responsibility of the Commissioners of Quetta and Kalat.

An effort has been made in the following pages to give broad details of the progress made by some of the important government departments in their respective fields of development activity in the Frontier Regions.

Education

In order to give further impetus to education, a full-fledged Directorate of Education has been established which will tackle the problems of this area more expeditiously and effectively, giving particular attention to technical education. As it is, phenomenal progress has been made in this field already, and the relevant figures make really impressive reading.

Twenty primary schools for boys and five for girls have been added last year, bringing the total number to 343 and 23 respectively. Four middle schools for boys and one for girls have also been established; the total now is 40. Besides, two more high schools have been opened. The total number of students in these schools has gone up to 25,800, out of which 800 are girls, as compared to 24,000 boys and 750 girls last year. The number of teachers has also been increased; it is now 1,502 as compared to 1,360 during the previous year. Approximately Rs. 2·35 million are proposed to be spent on education during the current year as against Rs. 1·45 million expended last year. This increase becomes all the more remarkable in the light of the fact that only a little over Rs. 100,000 were spent on education in 1947 when there were just 71 schools in the tribal area, with an enrolment of less than 6,000 (only 20 of them girls). The present total of enrolment is over 25,800 of whom 800 are girls.

A large number of scholarships is given to students hailing from the tribes. These include opportunities for study in the Peshawar University and the professional colleges attached to the Peshawar, Panjab and Sind universities where a number of seats are reserved for the tribal areas. This year five scholarships at Rs. 125 per month each have been sanctioned for military training, five of Rs. 75 per month for agricultural studies and eight of Rs. 100 per month each for technical training. The number of scholarships has gone up since independence from 315 (mostly school education) amounting to Rs. 19,400 to some 700 now with a total value of over Rs. 220,000.

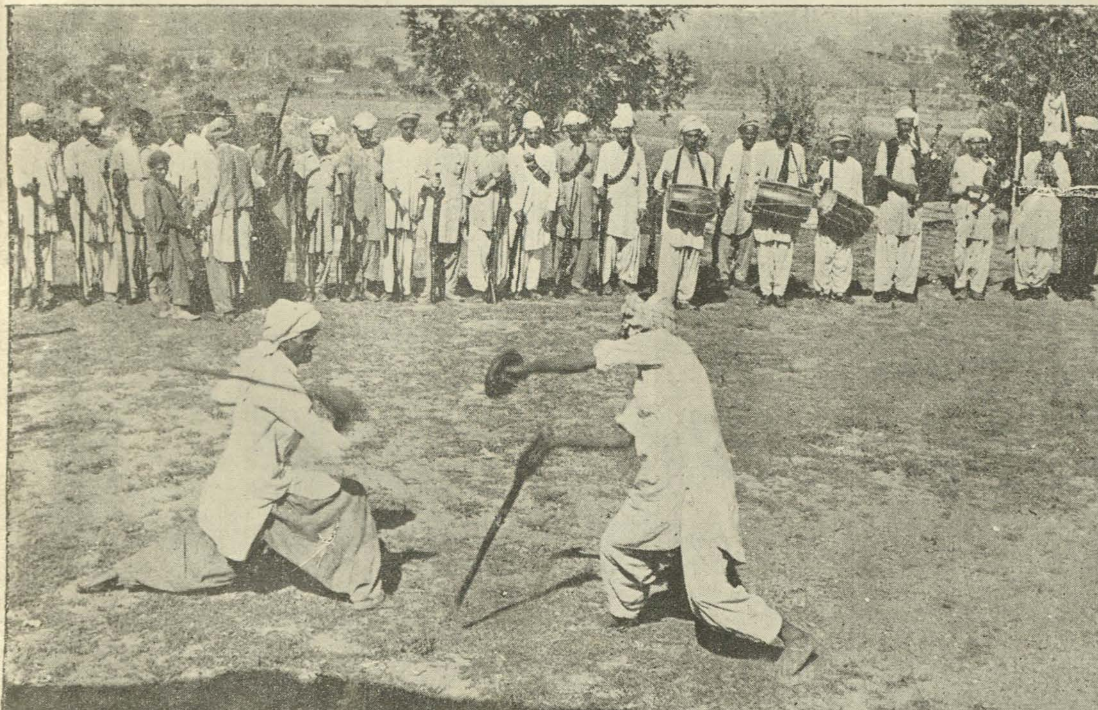
Health

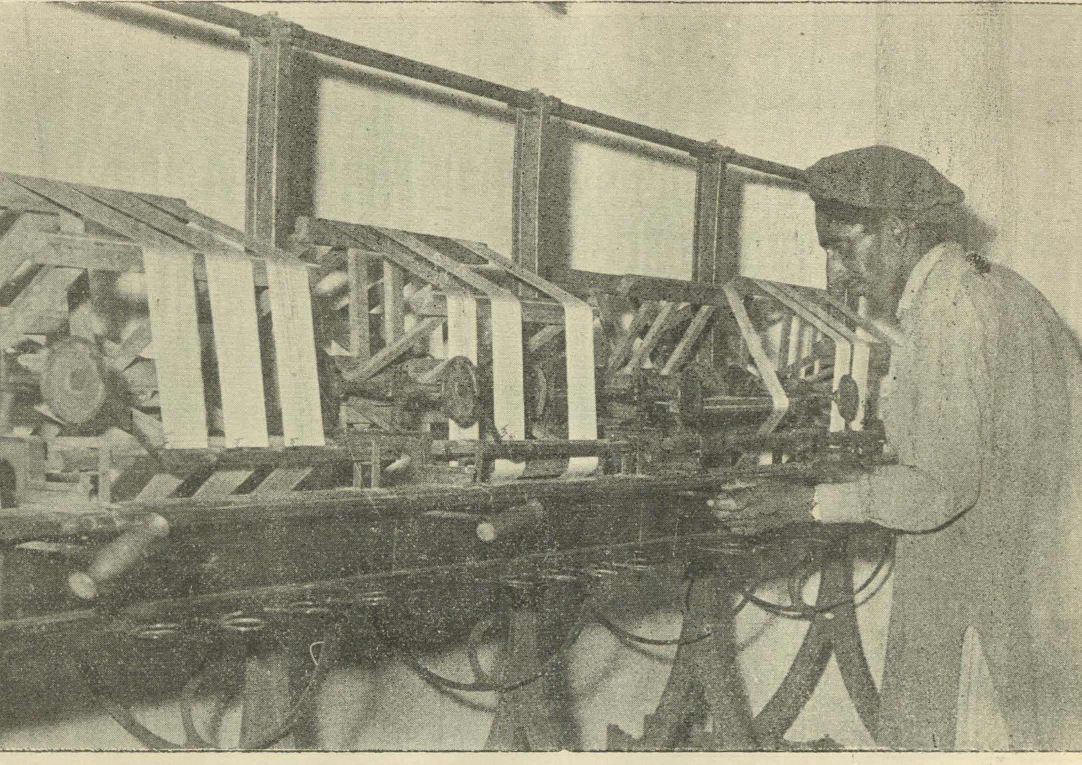
Consequent on greater attention that has been paid to Frontier Regions since independence, medical facilities have registered remarkable expansion, and the amount expended on health has gone up from about Rs. 159,500 to Rs. 970,000. There are now 29 hospitals as compared to 7 in 1947. Similarly, the number of dispensaries has risen from 7 to 48, showing a cor-



The woollen training-cum-development centre at Batkhela (Malakand Agency) gives subsidised training to tribesmen in the manufacture of blankets and tweeds

Dancing is part of life for some tribes. Here some tribesmen of the Hazara area perform the sword dance





Parachinar has a training-cum-development centre for sericulture. Trainees receive monthly subsidy a lump sum on passing out

Mazri work on cottage scale is very popular in parts of the tribal belt. A training-cum-development centre is located at Alizai (Kurram Agency)



responding increase in the number of patients treated in hospitals and dispensaries from 21,165 to 835,249 and of beds from 86 to 475.

Despite the geographical conditions obtaining in the Chitral state, health facilities have been extended to as remote a place as Baroghil on the Pakistan-Afghan border, only a little distance away from the border of the Soviet Union.

The hospitals at Drosh and Chitral are fairly well-equipped to attend to all types of medical and surgical emergencies. X-ray facilities too are available at Drosh. Free drugs are distributed by the Health Department in an attempt to combat malaria. The leprosy centre in the state is doing good work in treating and isolating patients.

Similar work is being carried on in other parts of the Frontier Regions as well. Anti-malaria and anti-typhus measures along with maternity and child welfare centres have been extended to almost all important places in the area. The department has spent nearly Rs. 3.2 million on child welfare centres under the social uplift scheme.

Industries

As the practice of agriculture is not possible on a wide scale due to the barren and mountainous terrain of the tribal country, every possibility is explored to supplement the meagre income of the tribesmen by encouraging them to take to cottage industries. For this purpose a number of training-*cum*-development centres have been opened at various places.

Twenty persons are trained annually in the *mazri* centre at Alizai in the Kurram agency. *Mazri* is a wild-growing fibre which lends itself excellently to making baskets, mats, *chappals* and other articles. Recently the training period has been extended from 6 months to one year and more staff has been recruited. The trainees receive a monthly stipend and Rs. 100 each after completion of training to help them establish their own concerns.

The metal training centre at Wana in the South Waziristan agency imparts training in metal and wood-work. The trained persons are given Rs. 500 each for the purchase of equipment to establish their own businesses. The woollen centre at Batkhela in the Malakand agency trains tribesmen in the manufacture of blankets, tweeds and other woollen material. During last year, the trainees manufactured over 400 yards of good tweed cloth.

The sericulture centre at Parachinar in the Kurram agency gives training in various branches of sericulture, such as silkworm-rearing, silk cocoon-reeling, etc. On completion of the course, the trainees are supplied equipment worth Rs. 250 each. Forty-seven tribesmen have received training so far, out of whom 14 have been employed in the Directorate of Industries, Peshawar, and the remaining have adopted sericulture as a profitable side busi-

ness. This centre distributed 524 ounces of disease-free silk seed to 1,305 tribesmen last year, and hopes to give away nearly 1,000 ounces during the current year. The centre maintains a 50-acre mulberry farm where Turkish, Italian, Japanese, Chinese and local varieties of the tree are progressing satisfactorily. A second sericulture centre is being opened from this year. This will be located at Chitral, and already five members of the proposed staff have received training at the Parachinar centre.

A sale and display depot for cottage industry products of the Malakand agency has been opened at Mingora a suburb of Saidu Sharif, the capital of Swat.

While there is as yet no big industry in the tribal areas as such, a very large number of tribesmen are employed in the mills and factories set up in the adjoining districts during the past years. However, there are a few schemes currently under examination for strarting some medium-sized industrial units. Among these are a starch factory in Swat, exploitation of the extensive marble resources in the Khyber agency and a factory for *kandsari* (semi-crude) sugar in the Malakand agency. An art-silk concern established recently by private enterprise at Miranshah in the North Waziristan agency is equipped with 10 power looms and has manufactured 70,000 yards of art-silk fabrics.

Agriculture

As stated earlier, the prospects for agriculture on a large scale are not available anywhere in the Frontier Regions, and the accent is mostly on cultivation of orchards. The services provided by the Agriculture Department, therefore, concern themselves mostly with fruit-growing.

A scheme has been introduced this year for the production and distribution of fruit plants, under which 800 acres of land will be brought under orchards every year. Plants of apple, pear, peach, walnut, almond, plum, apricot and other fruits numbering some 10,000 will be given away annually.

With the object of increasing the productivity of land, improved seed has been supplied to cultivators on a subsidised basis. Fertilizer too has been distributed free of cost in the Kurram agency. In order to convince the farmers of the benefits of modern agricultural methods and the utility of improved seed and fertilizers, 30 demonstration farms are to be set up throughout the agency for popularising ammonium sulphate and improved varieties of maize and rice.

Insect pest damages a great proportion of the fruit grown in the Kurram agency. Adequate control measures against the codling moth and other pests have, therefore, been taken. Various insect pests numbering 27 have been detected during a survey. Field workers equipped with sprayers,

dusters, insecticide and fungicide are employed to do the pest-control work which is free of any charge. Fruit nurseries spread over 27 acres and 254,300 fruit trees were sprayed last year. Nearly 40,000 fruit trees were banded with gunny bags and 16,975 trees were scrapped for the collection of codling moth. Treatment against stem borer was given to 36,457 trees, and 433 codling moth larvae collected and destroyed. Diseased dry branches from 10,234 fruit trees were pruned, 147,650 rat-holes were baited with zinc phosphide and various crops and vegetables spread over 11,693 acres sprayed and dusted with insecticides. Wheat, maize and rice seeds weighing nearly 3,000 maunds were also treated against pests and fungi.

Good quality fruit plants are raised in the fruit nurseries at Miranshah, Wana and Dargai and distributed free of cost among the orchard-owners. On the last tree-plantation occasion, 50,000 saplings of shade-giving trees were given away. Plant protection services will soon be extended to 4,000 acres for sugar-cane and 6,000 acres of maize and rice crops in the Malakand agency. The cultivation of sugar-beet for purposes of sugar-cane extraction in two of the three mills in Peshawar-Mardan area is already through the experimental stage in the Kurram agency.

Animal Husbandry

No less than 185,373 animals were treated during the year in the veterinary hospitals and by the field staff on tour. The previous year's figure was 111,715. The staff of the Animal Husbandry Department inoculated 107,952 animals and birds against contagious diseases, as against 50,243 inoculated in the previous year. The department has supplied 19 bulls in various villages for breeding purposes, while one stud buffalo bull and six stud bulls are stationed in the veterinary hospitals. Their total coverings during the year were 1,127.

The wool of Waziri sheep is medium coarse and better than that of other indigenous breeds. A scheme for the breeding of this sheep has been implemented in the North Waziristan agency. Waziri sheep won prizes in the National Horse and Cattle Show at Lahore and in the Regional Livestock Show at Peshawar. A number of cattle shows and fairs were arranged to popularise cattle and sheep-breeding among the tribesmen.

Forests

The administration of forests in the Malakand agency has been reorganized and brought under seven forest ranges. Five hundred trees needing removal were marked for sale by tenders during the last year. Plants numbering 178,362 were distributed free among the villagers. A tree-plantation week was observed in February 1959 when 1,638 saplings were sold to government departments. Besides, 5,000 willow cuttings were distributed among the people in the Swat state for transplantation along the river banks.

In the two nurseries at Parachinar and Alizai in the Kurram agency 32,000 trees were raised for free distribution among the tribesmen. The forest nurseries at Wana and Shahoor in in the Waziristan agencies produced 39,700 plants, out of which 39,150 were distributed free of cost among the local population.

Settlement

The provincial government has earmarked some 55,000 acres of agricultural land in the Thal and Bahawalpur areas and under the Ghulam Muhammad Barrage scheme for the settlement of tribesmen who wish to take to cultivation in more promising circumstances than obtaining in the Frontier Regions. Some tribesmen from the North Waziristan and Mohmand agencies have already proceeded to the Leiah area in the Thal and the Liaquatpur area in Bahawalpur division for settlement there. These new colonists are given substantial facilities which include interest-free *taccavi* loans for house-building and the purchase of agricultural implements and bullocks. They are also paid the expenses for travelling from their homes to the settlement areas.

EDUCATION

Soon after the new regime took over on 8th October 1958 it decided to review and revise the entire system of education in the country, the need for which had been constantly preached by former political regimes without being practised, and an Education Commission was set up for the purpose. This high-level commission will suggest concrete measures to orientate the education system with the requirements and aspirations of an independent, modern, progressing state, and is expected to submit its report shortly. In the meantime, the provincial Education Department continued its efforts to provide more and better means of education at the primary, secondary, higher secondary and college levels. It has not been able to achieve all that it wanted to during the past year, but steady progress has been maintained, and the budgeted expenditure for the current year has been taken to as high as Rs. 121,546,000.

Primary Education

The department has been purposefully pursuing its programme for wider primary education facilities. The end in view is to provide free and better primary education throughout the province, but due to limited resources this end is not yet in sight. The department is, however, anxious to implement a graduated programme of expansion calculated to provide this basic necessity to the people. Although it is difficult to prescribe a target date for achieving the ideal of universal primary education, nevertheless the progress towards it is firm and steady.

The position in 1948 was that, counted together, there were in all 8,598 primary schools in the various provincial and state units then forming West Pakistan. The number of children studying in these schools was 596,379 and the expenditure incurred was Rs. 17,120,774. The position eleven years later presents a marked contrast. By this time the number of schools has gone up to 16,461—almost double—the children total 1,390,000 and the cost of running these schools has increased to Rs. 61,715,470.

During the current financial year, the government is to open 350 new primary schools in the province, and expects to spend Rs. 860,760 on this project. In addition to these, 150 primary schools will be opened in the former Punjab area under a running scheme. Besides, it has set apart Rs. 200,000 for the construction of buildings for primary schools in the under-developed areas of the province. The people are also to be induced to take interest in education and to open new schools

on their own without waiting for official initiative.

Secondary Education

Secondary education in the country has been criticised for being too bookish and not in consonance with the needs of a free modern society. The most complex problem in this sphere is the diversification of courses to provide adequately for varied aptitudes among school-going children. There has, therefore, been a marked shift from a purely general to technical education, and every effort is being made to impart a technical bias at the secondary stage. Five technical high schools have been opened in the province, and it is proposed to add technical courses at various stages of secondary education. With a view to making the matriculation stage fairly self-sufficient, new courses in woodwork, metalwork, book-keeping and accountancy have been added.

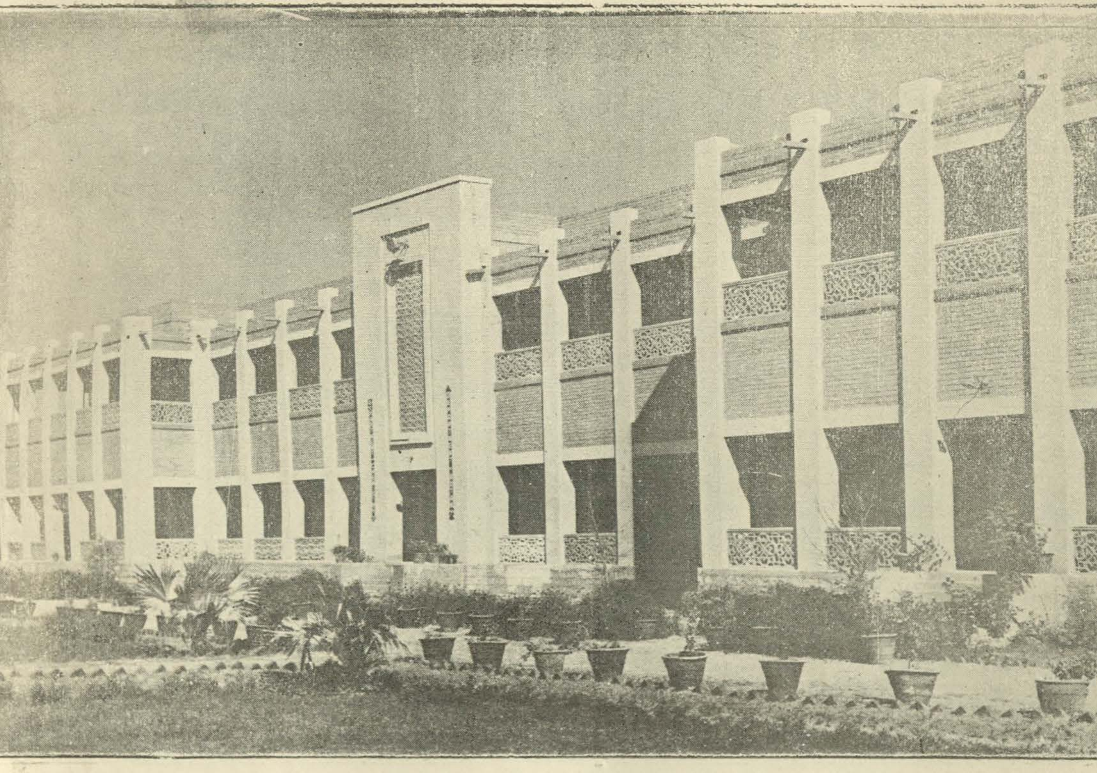
During the year under review, six new high school were opened, while high classes were added to 21 middle schools, and 31 primary schools were raised to middle standard.

A sum of Rs. 1,093,000 has been provided in the current year's budget for opening six more high schools in West Pakistan, while a recurrring grant of Rs. 124,450 has been made available for improving the existing government high schools in respect of staff. Provision has also been made to set up a government middle school at Gwadar and to give additional financial assistance to privately managed Anglo-vernacular secondary schools; a recurring grant of Rs. 30,800 and a non-recurring grant of Rs. 300,000 having been allocated for these purposes respectively. Besides, 21 middle schools will be raised to high standard, and middle departments will be added to 31 primary schools.

Higher Secondary Education

Several education commissions and committees have recommended that the intermediate stage should be separated from colleges because of the fact that students of this stage are yet too young to benefit from the teaching provided there. In some parts of the province this has been done, and the intermediate has been re-named as the higher secondary stage. The control of this stage of education has been transferred from the universities to the boards of secondary education, specially set up for the purpose.

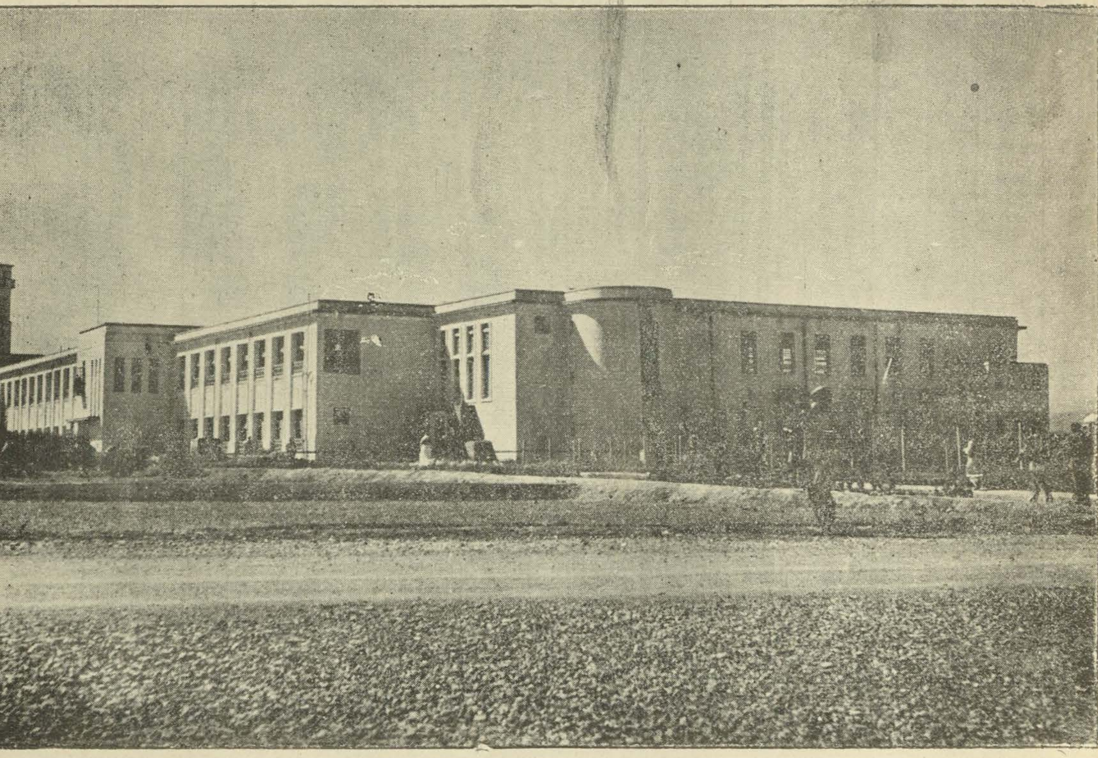
A special intensive course was organised for the lecturers of intermediate colleges in the Central Training College, Lahore, for training in teaching techniques. The Education Department also organised one-month refresher courses at Lyallpur, Gujranwala and Lahore for students who had studied science in Urdu at the secondary stage and had taken up science subjects in the first year class. Last year, six higher secondary schools/intermediate colleges were opened in the province, while eight more higher secondary schools are proposed to be



The new hostel of the Government College for Women in Hyderabad

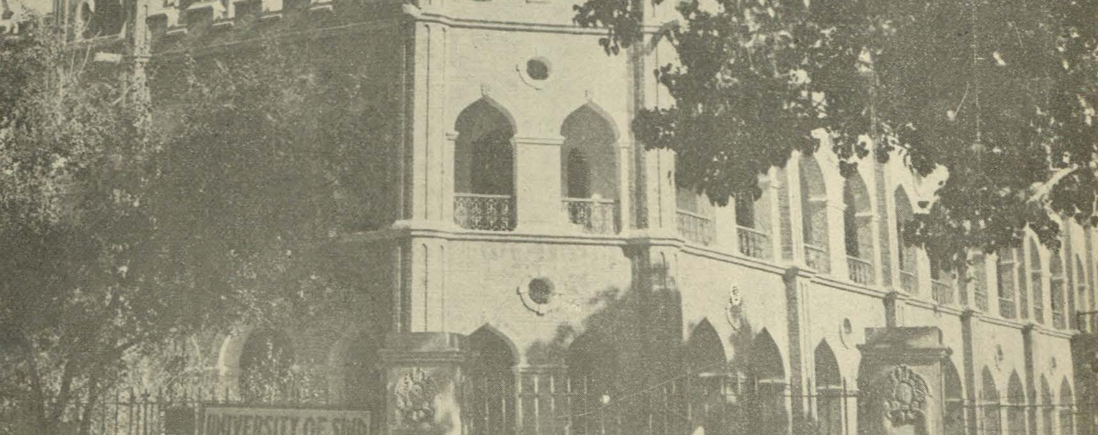
Girls learn the art of cooking in the College of Home and Social Sciences at Lahore





One of the many beautiful new buildings of the Peshawar University. This is the administrative block

The present premises of the Sind University at Hyderabad. New buildings are being constructed at Jam Shoro



set up during the current financial year. An amount of Rs. 684,010 has been provided in the current year's budget for the promotion and consolidation of education at the higher secondary stage.

Collegiate Education

The progress made in the sphere of college education in West Pakistan is really admirable, and there are plans to further reinforce the efforts on this side. Since independence, 10 new intermediate colleges have been raised to degree status, F.Sc. classes have been started in 18 colleges and B.Sc. classes added to 10 colleges. There are at present 64 government colleges, out of which 38 are teaching up to degree classes. Besides, there are 51 colleges managed by private organisations and local bodies, which are given grants-in-aid from the provincial exchequer. Two new degree colleges will be opened and two intermediate colleges raised to the degree standard during the current financial year.

The number of students in government as well as privately-managed colleges has risen from 12,500 in 1947 to 52,500 in 1958-59. Apart from regular expenditure on its own colleges, the government also provides special grants for replacement of scientific apparatus, library books and furniture. It is heartening to note that private bodies too have become aware of the acute problem of over-crowding in educational institutions and have shown initiative in opening a few higher secondary schools and colleges. A maintenance grant of Rs. 100,000 has been set apart this year for such private institutions as are approved by the Board of Secondary Education or the university concerned. This is in addition to Rs. 480,000 earmarked as grants for buildings, science equipment and library books.

In order to attract enthusiastic young men who have good academic qualifications and a flair for teaching, it is necessary to offer them handsome terms and better prospects so that they are drawn to the teaching profession. A step in this direction is the recent introduction of uniform and more attractive pay-scales. These, it is hoped, will provide an impetus to fresh talent and also enhance the prestige of the profession.

Universities

The three universities in the province—Peshawar, Panjab, and Sind—are expanding their field of activities and are instrumental in promoting professional and specialised education to fulfil the needs of a society which is rapidly modernising itself. The government keeps itself aware of the financial requirements of the universities, and is giving them a number of grants to cope with their rapidly expanding needs. In the current budget Rs. 3,000,000 have been set aside to enable the universities to carry on their projects for the construction of new buildings, work on which is already in hand. During the last three years the Peshawar Uni-

versity has received for building grants totalling Rs. 5,900,000, Sind has been given a total of Rs. 2,800,000 and Panjab has received in all Rs. 3,500,000.

Teachers' Training

The Education Department has taken concrete steps to eliminate the previous ineffective practice of organising education on foreign lines, and has adopted measures to start new activities and develop existing facilities in order to evolve a pattern suited to the requirements of Pakistani children and the society they live in.

Courses for a degree of Master of Education have been started in the Central Training College, Lahore, and a child guidance clinic has been set up in the Lady Maclagan Training College for Women, also at Lahore. Plans have been given final shape for further development of the College of Home and Social Sciences at Lahore. Furthermore, schemes have been finalised to open a training college at Bahawalpur and a training school at Dadu, for which provision has been made in the budget for an amount of Rs. 257,880 of which Rs. 177,680 will be recurring.

Extension Service

To develop and co-ordinate programmes of 'in-service training' for teachers and officers of the Education Department in order to enable them to obtain better understanding of the present-day concepts and contents of education and acquire greater skill in discharging their duties, the provincial government has set up the Education Extension Service Centre at Lahore. The project will cost Rs. 1,900,000 with another Rs. 495,750 as recurring annual expenditure. The Ford Foundation of the USA is sharing the cost of the project with the government. The centre will be completed within a period of three years, and a site of 20 acres has been acquired for building it on the new campus of the Panjab University.

A three-day seminar on evaluating the 'in-service' education programme in West Pakistan was held under the auspices of the centre in April 1959, which was attended by 35 officers of the Education Department. The centre was also associated with the organisation of a working seminar on educational adminisitration sponsored by the Regional Directorate of Education, Lahore, durinig the same month.

Physical Education

The Government College of Physical Education is the only one of its kind in West Pakistan, and trainees from all parts of the province are admitted to it. At present it provides three courses: the junior diploma course for matriculates, the post-graduate senior diploma course, and a refresher course for physical training instructors from the army and the police. A proposal to introduce a course for the master's degree in physical education is under active consideration.

Up till now the total number of students in this college (including women trainees) was 75. Sufficient funds

have been provided this year to accommodate at least 150 students, while efforts are being made to raise this number to 225 in the near future. The staff is also being increased.

New Cadet College

The foundation of a new building for a cadet college was laid in January 1959 at Petaro in the Hyderabad division. Actually, the college has been functioning temporarily at Mirpurkhas since August 1957. The object of this institution is to train young men for leadership in different fields of activity. At present, there are 66 boys studying in the college. Forty more will be admitted in the new session. Meanwhile, construction work involving an expenditure of Rs. 2·7 million is going on at Petaro at a rapid pace.

Scholarships

The total amount spent on scholarships during the year under review in all the fields of education was Rs. 3,832,760. Measures have been adopted to make the distribution of scholarships more rational, and particular attention is being given to the needs of under-developed areas. This year, a special scholarship grant has been given to Sadiq Public School, Bahawalpur; Aitchison College, Lahore; Lawrence College, Ghoragali; and Pre-Cadet College, Mirpurkhas. This grant is meant for the award of scholarships to the sons of parents who are not normally able to educate their children in these special institutions.

During the period under review, ten scholars were sent abroad for training or higher education in different subjects of educational importance, including psychology, English literature, English language, etc.

Scouts and Guides

Conscious of the necessity for such cultural activities as may result in inculcating among the students as well as the general public a sense of collective life and pride in their inherited traditions, the Education Department is providing financial encouragement to a number of organisations working for art and literature in the province. The government has allocated a sum of Rs. 816,000 as new expenditure in the current year's budget for such activities, in addition to grants already being given to different organisations.

The Boy Scout and Girl Guide movements continued to receive encouragement and patronage. The West Pakistan Boy Scouts Association organised nine scouts' and ninteen scouters' training camps during the year, which were attended by 2,474 scouts and 1,576 scouters. A contingent of 1,674 Boy Scouts from the province attended the Second Pakistan National Jamboree held at Chittagong in December 1958 and January 1959, while 47 scouts and scourters participated in the Iranian National Jamboree at Teheran during July 1958.

Prominent features of the Girl Guide movement were adult literacy and grow-

more-food campaigns. More than 1,500 adults were taught to read and write. Guide companies and Blue Bird flocks have been opened in the urban community development areas of Misri Shah and Dharampura and in the Governor's House at Lahore. A separate training department has been set up at the Guide House, while an additional grant of Rs. 50,000 has been provided for the association in the current year's budget.

Pakistan Art Council

Ever since its establishment, the Pakistan Art Council has been working to promote interest in art, music and drama. It has made an ambitious plan to widen the scope and field of its activities, and the government recently decided to inrease its grants from Rs. 25,000 annually to a non-recurring Rs. 50,000. This will enable the council to maintain adequate permanent staff. A building grant of Rs. 200,000 has also been provided during the current financial year.

Lahore Stadium

With a view to providing a suitable centre for athletics, sports and games in the provincial capital, an ambitious plan was prepared in 1950-51 for constructing a magnificent self-contained stadium at Lahore. The work was initially entrusted to the Lahore Improvement Trust and was later assigned to the Buildings and Roads Department in 1955. The total estimated cost of the project is Rs. four million. The provincial government provided a sum of Rs. 700,000 during 1955-56 for following a phased programme of construction. Earlier, a total of Rs. 400,000 had also been set aside for the purpose. Rupees 1,200,000 were sanctioned for the project during 1957-58 out of which only Rs. 500,000 were utilised. Since the October Revolution, however, work has been started in right earnest, and the arena of the main stadium was formally declared open some time ago.

Literary Organisations

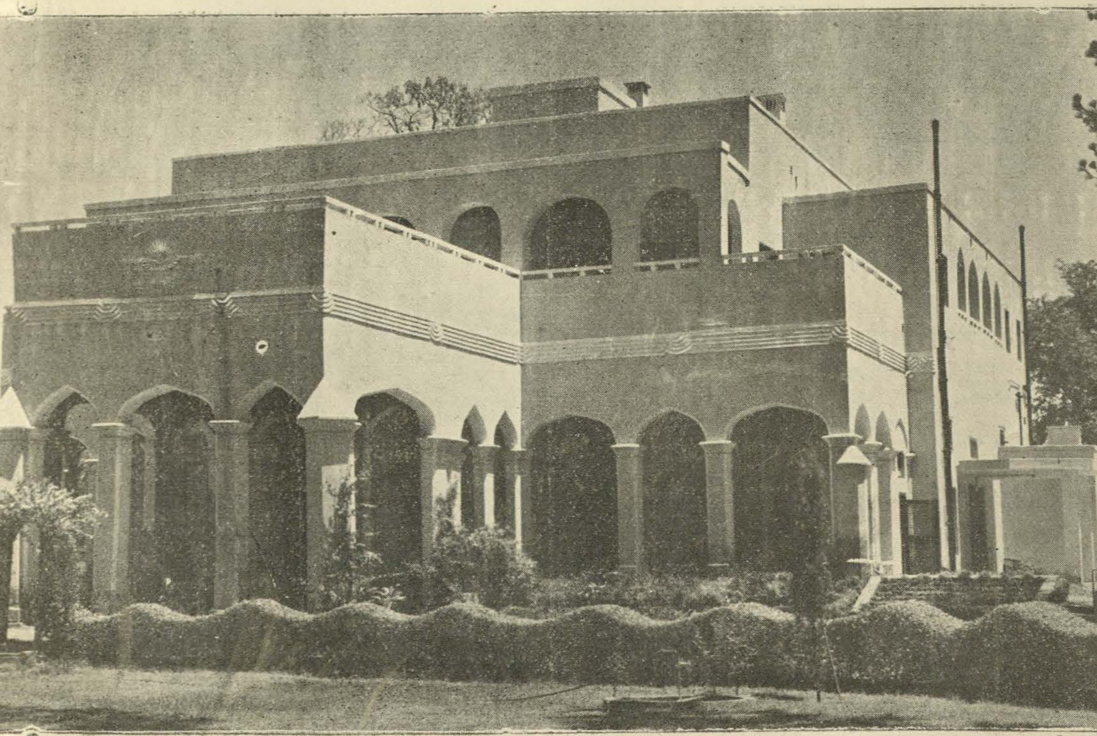
The Bazm-e-Iqbal, originally known as the Iqbal Academy, was established in Lahore in 1950 to conduct research on the philosophy and teachings of the national poet. The initial grant was Rs. 100,000. Since then, the society has been receiving varying grants from year to year. It has published a number of books on the poetry and philosophic thought of Iqbal, and is also bringing out a quarterly journal entitled 'Iqbal', issues of which are published in English and Urdu alternately.

An autonomous board for the Advancement of Literature was created by the Government of West Pakistan with an initial grant of Rs. 200,000 to arrange or help in the publication of



March-past after a P. T. display at the opening of the main arena of the Olympic Stadium at Lahore. The stadium is still under construction

Alhamra, home of the Pakistan Art Council at Lahore. Cultural bodies receive extensive aid from the government





The Cadet College at Hasan Abdal prepares young men for a military career. A similar college is being built at Mirpur Khas

A view of the Sadiq Egerton College at Bahawalpur



classics and new books of outstanding merit. The board also translates standard works of foreign languages, gets books written on selected themes, and awards prizes every year to the authors of books, articles and poems of high literary value. It brings out a literary quarterly journal in Urdu, entitled 'Sahifa'.

The Sindhi Adabi Board was established in Karachi for promoting the cause of Sindhi language and literature. It is receiving an annual grant of Rs. 100,000 and has produced a number of publications.

The Pushto Academy was set up in Peshawar for the advancement of Pushto language and literature and is in receipt of an annual grant of Rs. 100,000. It has so far produced nine publications—seven original and two translations.

The Institute of Islamic Culture was founded by the late Mr. Liaqat Ali Khan with the express purpose of promoting Islamic studies and research and publication of works of high merit. It has so far produced 52 books, both in English and Urdu, and receives an annual grant of Rs. 25,000.

The Bhitshah Cultural Centre aims at presentation and study of the works of Shah Abdul Latif, the great Sindhi poet, who has greatly enriched the cultural heritage of the southern region of West Pakistan. The government sanctioned a grant of Rs. 500,000 for the construction of a building for the centre at Bhitshah. A further sum of Rs. one million for the purpose has been provided in the current year's budget in addition to a non-recurring maintenance grant of Rs. 65,000 and a building grant of Rs. 200,000. The construction work has already been undertaken.

Youth Hostels

In order to foster a sense of good fellowship among students and other young men and to promote trekking and study tours, youth hostels have been established in the province. Eight of these have been provided with permanent buildings. Plans for 11 more hostels have reached the final stage, and construction work will start shortly.

During the period under report, mountaineering courses and bicycle tours were arranged by the Youth Hostels Association. In all, more than 1,000 young men participated in these activities.

Cadet Corps

The West Pakistan Cadet Corps scheme was originally drawn up by the former Punjab Government for compulsory military training in educational institutions. However, the scheme could not be implemented for various reasons. This year an amount of Rs. one million has been provided in the budget for spending during the first year of the scheme's implementation. Some 8,000 cadets are expected to be trained during the year.

BUREAU OF EDUCATION

The need for a central agency to provide a regular flow of information on educational needs and developments had been felt for some time. In response to this need, the West Pakistan Bureau of Education was set up in October 1958 at Lahore.

The purpose of the bureau is the collection, analysis, dissemination and exchange of educational information. It will co-ordinate the work already being done in this behalf at district, divisional and regional level, so that full information is available from one source instead of many scattered throughout the province.

The bureau is an attached office of the Education Department, and its three sections will maintain close and continuous liaison with regional, divisional and district offices of the department as well as with the colleges and universities.

The Statistical Section will collate, consolidate and interpret statistics in tabular or graphic form. It will also maintain statistical records on education in East Pakistan and foreign countries, and will collect and provide statistical information on allied educational activities such as libraries, museums, cultural bodies, youth movements, etc.

The Documentation Section will maintain a library on all aspects of education and prepare and circulate bibliographies of books, sources of information, lists of teaching materials and summaries and abstracts of publications received. It will also collect samples of teaching aids, and answer enquiries from educators, institutions and the public.

The Publication Section will keep the public informed on educational matters through news-letters, pamphlets, abstracts and monographs on surveys carried out by the Education Department or other departments whose work is related to educational development. It will also prepare an annual report on the activities of the Education Department and publish a journal dealing with educational development and thought in West Pakistan and abroad.

One of the future tasks of the bureau will be to stimulate study and investigation of current educational practices and compare them with the practices overseas. Competent authorities will go into matters like low-cost school buildings, standardization of school equipment, composition of text books, reform of examinations, etc. The bureau will assist by helping in planning and initiating the studies, supplying information to the authors and finally in editing and publishing the results.

A beginning has been made in launching these services. The Statistical Section, for instance, has completed an educational survey of West Pakistan for the year 1956-57. The survey contains data on the number of edu-

cational institutions and their enrolment, together with details regarding the number of students of different age groups, the number of teachers, the total expenditure on education, and the expenditure per student in the primary and secondary schools. This survey is now being printed for circulation, while the section is presently engaged in preparing similar surveys for subsequent years.

The bureau is also organising the indexing of news on educational matters appearing in local and foreign newspapers, bulletins, etc. UNESCO has assigned an expert to advise it on the organisation and development of the Documentation Section, while another expert on statistics is shortly joining the staff.

A working conference on educational statistics was convened by the bureau in June, 1959 which was attended by representatives of the Education Department, the central government's Bureau of Statistics and the Statistical Advisor to the Government of Pakistan. The conference revised and improved all the existing forms used in the Education Department for compilation and tabulation of basic data on eductional statistics. It also made certain recommendations on changing the procedure for acquiring this data.

TECHNICAL EDUCATION

Independenc brought with it a growing consciousness of the need for an educational system which should meet the shortage of scientists and technicians, and be suitable to Pakistan's own peculiar circumstances. Efforts in this line in the recent past resulted in the Pakistan Council of Technical Education which recommended the establishment of separate directorates of technical education in the provinces.

The West Pakistan Directorate of Technical Education has a well-defined interest in the scope of education at school level. Already, there are in existence in West Pakistan six special technical high schools at Bahawalpur, Hyderabad, Jauharabad, Lyallpur, Peshawar and Quetta. These schools have been equipped by the United Kingdom under the Colombo Plan, and some of the members of the staff have undertaken courses of training in Britain to fit them for their new responsibilities. Subjects like woodwork, metalwork, electricity and technical drawing have been introduced at the matriculation level, and a new examination called Matriculation (Technical) has been introduced.

Technical Schools

The general syllabi at the middle and high school stages have been re-orientated to give them a technical bias. Twenty high schools are being converted into multilateral schools providing instruction in manual crafts,

agriculture, commercial subjects and domestic science. These institutions will be schools offering a broad-based general education which will enable the new generation to feel at home with the modern age of science and technology.

Polytechnic Institute

A polytechnic institute was opened at Rawalpindi in October, 1958. Here the course of mechanical engineering includes machine shop technology; drafting and design, pattern making, moulding, welding and metallurgy, electricity, and radio and electronics. It has also been decided to introduce courses in building construction, architecture, diesel technology and automobile engineering. The polytechnic will also arrange for a large number of part-time courses for people already employed in different industrial trades.

The buildings of the polytechnic and its hostels are under construction. Until these are completed, the polytechnic will function in buildings placed at the disposal of the Education Department by the Army General Headquarters. The polytechnic workshops and laboratories will be equipped with the most modern facilities, and the equipment is being supplied by the Ford Foundation at an estimated cost of Rs. 2,500,000.

Commercial Training

Commercial training centres are being reorganised under this directorate, and in addition to the five existing commercial training centres, six new ones—at Lahore, Rawalpindi, Quetta, Hyderabad, Peshawar and Dera Ismail Khan are being started. Recruitment of staff is expected to be completed by August 1959.

Technical Education Council

The Directorate of Technical Education will require the services of an advisory body which will consist of representatives of the government's techical departments, the major sectors of industry and commerce, and the armed forces, in order it appraise the technological needs of the country. It is, therefore, proposed to set up a body to be known as the West Pakistan Technical Education Council. It will have a purely advisory capacity and will consist of committees for manpower, higher technical education, technical institutes and the technical bias high schools. The council is being established in the very near future.

INDUSTRIES

In the prevailing economy, industrial development is possible only with increased production from existing units and more exports in order to earn foreign exchange. This would not only provide consumer goods at cheaper rates but also open up greater avenues of employment for the people. The import of luxuries has to be cut down, and emphasis laid on the manufacture of essential commodities. A lesson has thus to be learnt from past mistakes when precious foreign exchange was drained off on the import of luxury goods and avoidable items.

The industrial policy announced by the new regime in February 1959 dealt with this problem more elaborately. It envisages greater attention towards the development of small-scale and cottage industries and encourages the maximum export of country-made goods. The introduction of the Export Bonus Scheme is a positive and practical step in this direction and has opened up a new era of industrial progress in the country. West Pakistan is making the best use of this scheme, and the provincial textile industry has already exported yarn and cloth worth several millions of rupees. Sports goods and tanned leather have also been exported in large quantities. From the exchange earned through this drive, industrialists will be allowed to import capital machinery and balancing equipment in order to raise their production capacity.

To ensure efficient and economical running of existing industrial units, the new industrial policy provides for their balancing and modernisation. To achieve this object, the Pakistan Industrial Credit and Investment Corporation, commonly known as PICIC, has been set up with its branch at Lahore. This corporation advances loans to industrialists the value of whose installed machinery is not less than Rs. 100,000. Loans are given in Pakistani currency or in foreign exchange, as the need may be, and an interest of about 7% is charged. Industrialists have also an opportunity to get loans from the Development Loan Fund of the USA, either directly or through the PICIC.

The provincial government has set up a Foreign Investment Bureau in the Directorate of Industries at Lahore to provide guidance and facilities to foreign investors to enable them to invest their capital in this country. Many liberal concessions are being given in this respect. The bureau is manned by three senior officers of the department.

With the concurrence of the central government, a short-term plan has been introduced according to which those industries are to be developed in a period of 18 months which consume indigenous raw material, have export potential and can earn or save substantial foreign exchange. The Second Five-Year Plan is also under preparation and will be implemented on the completion of the short-term plan.

New-comers who were permitted to establish industries were afforded facilities during the year under review as regards procurement of land, power, capital issue and building materials. Import licences were also secured for existing industries for raw materials, spares and other accessories. Machinery equipment for balancing and modernisation was also secured which resulted in the increase of their output.

To give an impetus to the small-scale and cottage industries in the province and to maintain a regular flow of raw materials for these industries, the Industries Department obtained a bulk import licence of Rs. 2·5 million. The required raw materials were imported on this licence by the Co-operative Department and distributed among artisans all over the province through regional distribution committees on which the Village-AID Department was also represented. Raw materials were also provided to the nine cottage industry development centres on no-profit-no-loss basis. The industries which were dying out for lack of raw materials were thus saved from extinction.

A Small-Scale and Cottage Industries Development Corporation is also being set up in the province to tackle the many and varied problems faced by minor and cottage industries. This corporation will import raw materials, arrange their equitable distribution amongst small artisans and market the finished goods. It will also extend credit facilities to the artisans.

Extensive training facilities to artisans and craftsmen are also being provided. In view of the fact that the wholetime demonstrators already employed in the development centres cannot give efficient assistance in the designing of new manufactures, it has been proposed to establish a central design section in the National College of Arts at Lahore.

The reorganisation of development centres is also proposed. A workshop will be attached to each centre to give thorough practical training to the craftsmen, and in order to attract more and more trainees stipends will also be awarded.

Statistics

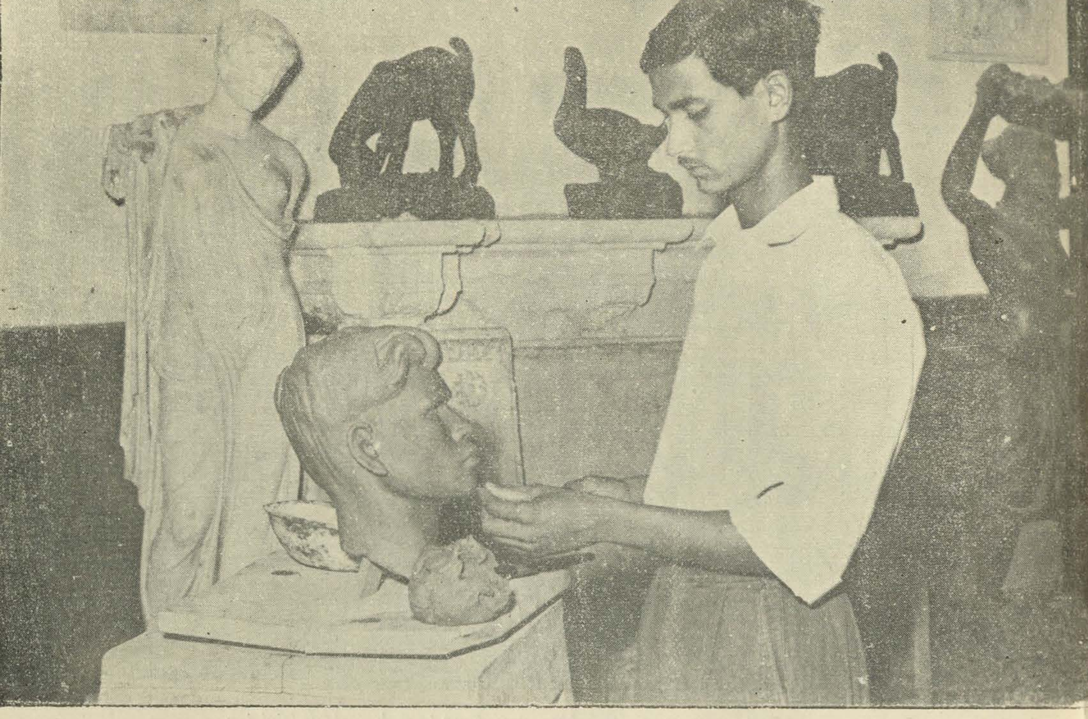
Reliable statistics are necessary for balanced development of the industrial potential. The statistical wing of the Industries Department has collected data and compiled statements in respect of small-scale and cottage industries showing the quantity and value of raw materials used, goods produced and labour employed. This wing is now



Delicate pottery from Ahmadpur East in Bahawalpur Division

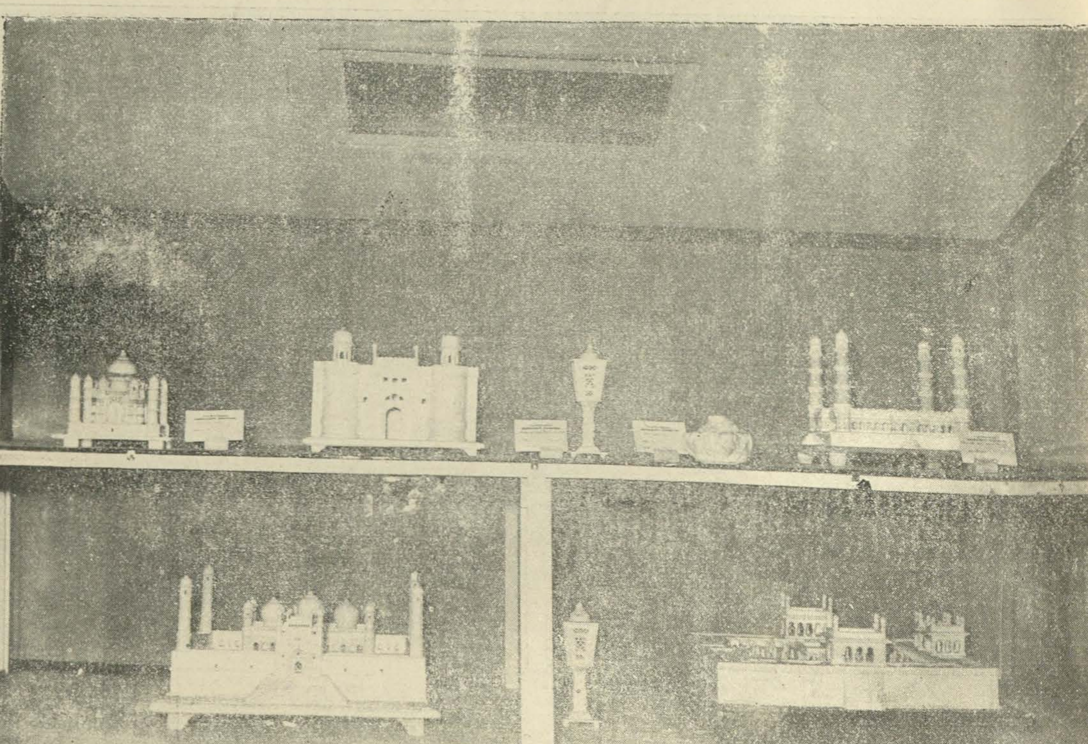
Attractive table lamps are made out of camel skin in Multan





A student of the National College of Arts, Lahore, sculpts a bust in clay. The college is expanding rapidly and new classes have recently been introduced

These models of historical monuments are built in marble by cottage workers



carrying on a survey to assess the extent of invetsments made in the small-scale and cottage industries so far.

Technical Education

The old Mayo School of Arts at Lahore was reorganised and expanded during the year under review and re-designated as the National College of Arts. A highly qualified foreign artist was engaged as principal and the new subjects of industrial design and architecture introduced. The syllabus of the college has been thoroughly revised so as to impart higher teaching in the visual arts.

Difficulties in the way of construction of buildings, installation of equipment and recruitment of staff for technical training in the province were overcome, and six new technical institutions were opened in Peshawar, Sialkot, Lahore, Bahawalpur, Khairpur and Hyderabad.

The Industries Department has established cottage industry development centres at all the divisional headquarters. It is proposed to train 90 craftsmen, ten at each centre, in particular crafts. A monthly stipend of Rs. 30 will be paid to each trainee.

Night classes are also proposed to be started at all the technical institutes maintained by the department for the benefit of technical personnel already employed in industry. A beginning has been made in this behalf, and the technical institute at Lahore has started such classes in engineering subjects.

Besides the cottage industries development centres, there are eight sale and display centres all over the province, a model tanning and footwear centre at Gujranwala, four wool spinning and weaving-*cum*-training centres, five carpet industries development centres, two surgical and metal centres, four centres for the development of cottage industries in the tribal area, and six development centres for sericulture.

Administrative Changes

The Department of Supply established a year earlier was abolished during the past year, and its work of procurement of government supplies and control of industrial raw materials was handed over to the Industries Department.

Adequate powers have been delegated to all the Deputy Directors of Industries in the regions to enable them to effect prompt disposal of local work and provide better service to the industrial community in the various areas.

The subject of mines which was earlier entrusted to the province was again transferred to the central government to ensure scientific and co-ordinated exploitation of the mineral wealth of the country. The mining wing of the Industries Department was thus abolished.

Undesirable Companies

An ordinance called the Undesirable Companies Ordinance was promulgated

during the year to suppress the activities of all those organisations which were carrying on the business of 'mutual aid' and crossword puzzles and had been responsible for defrauding the gullible public of large amounts of money.

New Factories

The government has decided to keep away from active participation in commercial undertakings, leaving the field to private enterprise. For example, the Khairpur Virginia Tobacco Redrying Factory has been sold to a private concern. Steps are also being taken to liquidate government interest in the textile mills at Khairpur and Bahawalpur.

A glue factory at Bahawalpur; an asbestos cement plant at Lahore; a baby food manufacturing plant at Renala Khurd (Montgomery district); a maize starch factory at Saidu Sharif (Swat state); a glacial acetic acid plant at Lahore; a unit for the manufacture of liver extract at Quetta and a maize gluten plant at Lyallpur have been sanctioned, and arrangements for their establishment are being completed at a rapid pace.

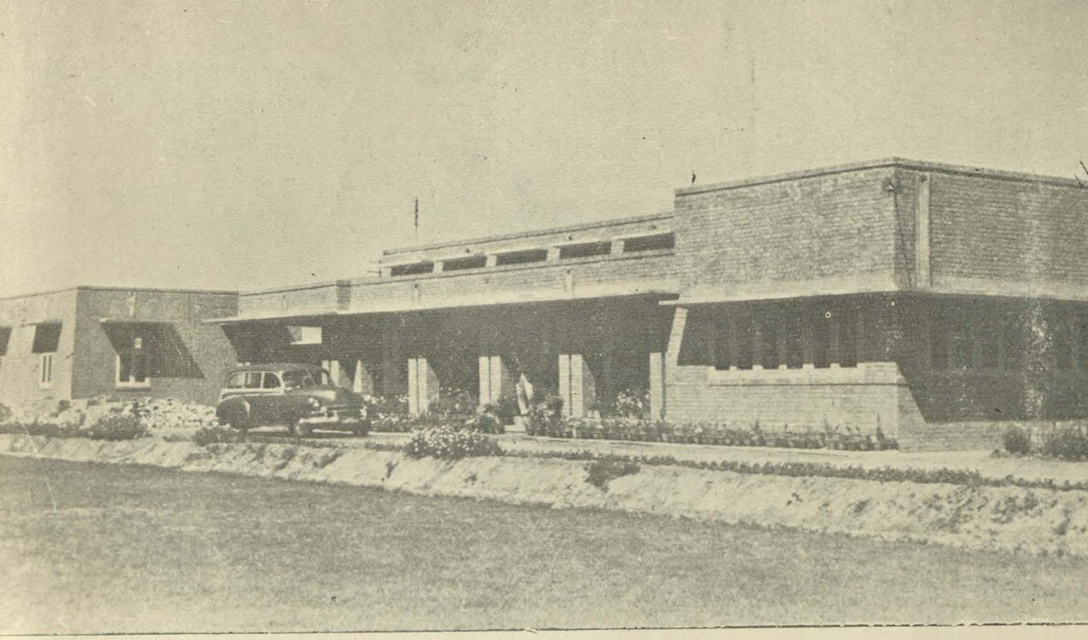
During the year 1958-59, some industries which were entirely new to Pakistan sprang up in the province. A plant for the manufacture of nylon monefilament, which provides raw materials for the sports goods industry, was set up at Lyallpur. Another plant was put up in Hyderabad for the manufacture of polythene sheets to provide packing material.

Pakistan's first rubber belting plant has been installed at Lyallpur. Two common facilities centres have been established in Multan and Hyderabad for the benefit of the handloom industry. These centres have been equipped with bleaching, dyeing, printing, finishing and mercerising machinery. The mercerising plant of the Multan centre has already gone into production.

A plant for the manufacture of hydro-sodium sulphate went into production during the year at Lyallpur. Machinery for a dyes factory at Nowshera has arrived. Another dye-stuff factory has been installed in Daudkhel by the Pakistan Industrial Development Corporation, and its products are being released to the market. A new plant for the manufacture of glucose has been installed in Peshawar. This commodity was entirely imported up till now.

A total amount of Rs. 12,300,290 was spent on the Industries Department during the year 1958-59, while a sum of Rs. 12,640,880 has been sanctioned for the current financial year. The approved budget includes eight new schemes costing Rs. 876,350.

The Government Metal (Surgical and Allied Industries) Development Centre, Sialkot, is being provided with additional machinery at a cost of Rs. 275,000. This will assist the indigenous surgical instruments and cutlery industry and will enable the small-scale and cottage manufacturers



The sericulture training-cum-production centre at Peshawar promotes silkworm rearing among farmers through subsidised training and monetary help to star business

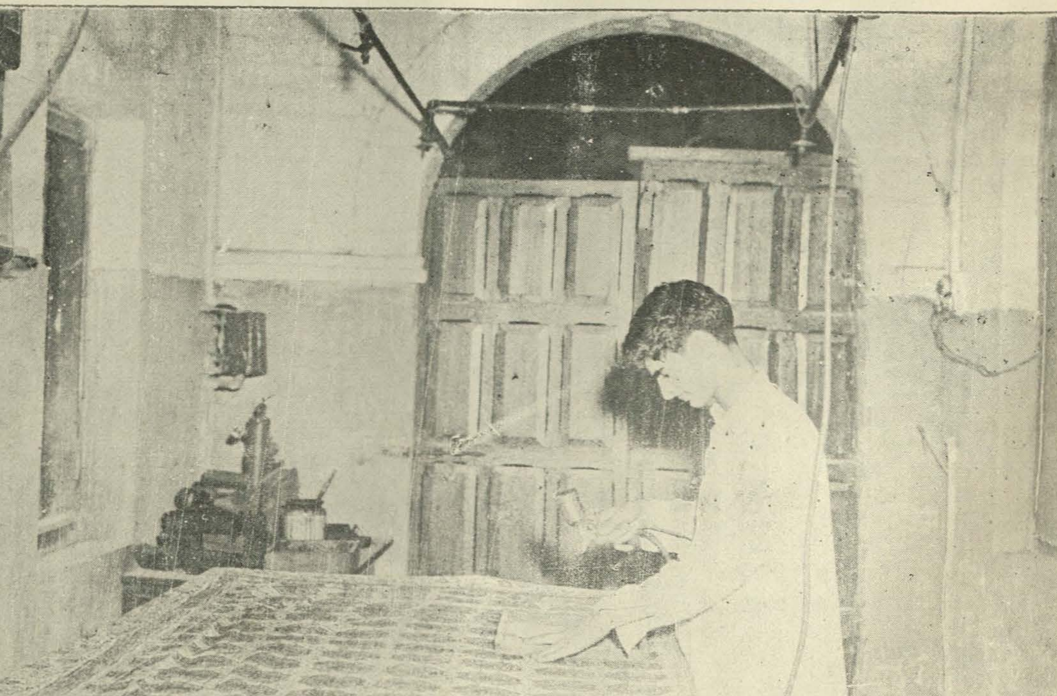
Seed is picked off an imported variety of mulberry for the silk industry





Beautiful brass and copper-ware is turned out in Peshawar and Lahore

A bed-cover is spray-painted in the training centre for textiles at Shahdara, Lahore



to improve the quality of their products and increase their output.

Export figures of cutlery and surgical instruments alone now stand at Rs. four million per annum. Exports are expected to be further augmented by using modern techniques which the centre would make available to the producers who are essentially cottage workers.

A sum of Rs. 300,000 has been sanctioned for setting up a wool spinning plant at the Carpet Development Centre in Hyderabad. The Khairpur region is known for producing extremely good type of carpet wool, and in order to develop the carpet industry in this area, a carpet development centre was established at Hyderabad. This has provided incentive to private enterprise and six carpet factories have since come into being. As the owners of these factories face difficulty in getting woollen yarn, the spinnery installed at the government-run centre will not only fill this vacuum but will, at the same time, impart training to the workers.

The machinery installed some thirty years ago in the Government Demonstration Weaving Factory at Shahdara near Lahore has outlived its utility and cannot produce cloth of good quality. Moreover, the very purpose of its establishment is being defeated as young men cannot be trained in textile technology on modern lines. The provincial government has, therefore, sanctioned a sum of Rs. 200,000 to replace the existing machinery during the current year. This training-*cum*-production unit is self-supporting and has yielded a profit of Rs. five million since its establishment.

The sales and display depot at Lahore will be renovated and re-equipped at a cost of Rs. 24,000 to make it attractive for foreigners who constitute the majority of the people visiting it.

LABOUR WELFARE

Labour welfare constitutes a priority problem and has received the foremost attention of the new regime, which has expressed its determination to afford as much facilities and as many amenities to labour and their families as may be possible under the prevailing circumstances.

The labour policy of the new government has been immensely successful and has been appreciated and commended by the workers which fact is reckoned to be a great achievement towards the solution of the labour problems faced by the country. The new policy envisages better wages, the provision of well-equipped canteens, healthy environments and commodious accommodation, and the introduction of a labour welfare fund.

The primary responsibility of the Labour Department is to prevent and settle industrial disputes, enforce the labour laws and inspect shops and commercial establishments with a view to detecting irregularities as regards provisions of the Shops and Weights Act. However, it also keeps a vigilant eye on every matter, be it important or minor, that aims at improving the lot of the workers and their general well-being.

The administration of the West Pakistan Department of Labour Welfare has been toned up since the October Revolution, and specific instructions have been conveyed to all subordinate offices in the province to rigidly enforce the various labour laws and other relevant orders issued from time to time. In order to further emphasise the importance that the new regime gives to the labour problem, a high level conference was called by the Governor, which was also attended by the central Labour Minister.

This conference decided to effect an over-all change in the labour policy and to evolve an efficient and prompt machinery for the settlement of industrial disputes. The question of granting weekly or occasional festival holidays with pay was also considered, besides many other items relating to the betterment of the labour class.

An important task of the Labour Welfare Department is to look to the development of healthy and really useful organisations of workers. Despite the shortage of staff, it has been able to inspect 1,764 factories out of 3,439 registered with it under the Factories Act. The employers have now realised the importance of registration, and the number of registered factories is, therefore, rapidly increasing in the province.

The year 1958-59 witnessed 15 strikes in various parts of the province and 134,173 man days were lost on this account. The loss of wages comes to about Rs. 300,000. On the other hand, the department had to handle 493 industrial disputes, which goes to show that conciliation efforts of the department met with remarkable success. At present, only 30 industrial disputes are waiting settlement while the department has already referred 12 disputes to the Industrial Tribunal.

The department prevailed upon the West Pakistan Textile Mill-owners' Association to raise the minimum wages of textile workers. The association, therefore, voluntarily fixed a minimum wage of Rs. 60 per month for unskilled workers. The mill-owners also agreed to give added amenities to their labour. Now, at least 25 % of the total strength of workers will be provided with housing accommodation. Canteens and consumer stores are also being provided. Efforts are also afoot to get the same privileges for workers in other industries also.

Violation of Factories Act

The department launched 8,957 prosecutions on account of the infringement of labour laws. Of these, 1,848 cases were registered under the Factories Act, 2,966 under the Trade Employees Act and 4,143 under the Weights and Measures Act. Because of these prosecutions, the cause of labour received great support and encouragement, and their rights were thus safeguarded against the high-handedness of employers.

Retrenchment Menace

Due to some uncertainties in commercial circles for a short period, a number of workers were thrown out of employment in certain sectors of industry, but the situation was immediately handled and the field staff of the Labour Welfare Department was able to get the retrenched persons re-employed in their respective jobs.

More Staff

In order to equip the department with more and efficient staff, four more labour officers have been sanctioned to work on the factory side, three additional officers have been deputed for conciliation work, a research officer is to help in the collection of labour statistics and six new assistant labour officers have to help the labour officers as additional factory inspectors. With the increase in staff, the department hopes to embark upon an ambitious and dynamic programme to set up definite and uniform standards of wages and other amenities in the various industries of West Pakistan.

FORESTS

It should not be difficult to understand why modern communities with a tendency to urbanisation should be putting a premium on the development of their forests which earlier generations tended to regard as places haunted by loneliness and evil. The reason is that the very progress of a country nowadays depends on forests. It is they which supply timber, fuel, grasses, medicinal herbs, gums, resins and fibres which are essential for a country's economic life. Incidentally, they also provide a resort for aesthetic pleasure. Thus, forests contribute directly to the well-being of body and soul, a balanced development of which is necessary for the advancement of a healthy civilisation.

The percentage of the area under forests in some of the European countries is as high as 50. The optimum area has been estimated at 20 %. However, West Pakistan inherited only 3,732,000 acres of forests at the time of independence, as against the 310,000 square miles of the total land surface. The proportion works out to something like 2 % and that marks a sharp contrast, underlining the need for urgent endeavours to increase our forest wealth at a greater tempo.

The present regime has been making a realistic approach to the problems of the country. In spite of heavy competitive demand on the limited financial resources of the province, an amount of Rs. 22,720,000 has been allocated to the Forest Department this year, the budget allocation for the last year being Rs. 19,410,000.

Retrospect and Prospect

For any sensible policy of afforestation or re-afforestation, it is necessary to chalk out a detailed programme of action for different units. These programmes are technically known as working plans. Such working plans covering an area of 1,708,000 acres have already been prepared and put into effect in West Pakistan. An area of 1,425,000 acres has been put under forests since independence; out of this 517,000 acres were added during the year under review alone. Thus our forests now command an area of 5,141,000 acres, covering 3 % of the land surface of the province. The total afforested and re-afforested land is in the neighbourhood of 317,000 acres, of which 67,000 acres were put under plantation during the year under reference.

An area of 1,482,000 acres is proposed to be taken up within the next two to three years for constitution into state forests. This area is situated along the coastal belt near Karachi,

in the Ghulam Muhammad Barrage zone, in the Taunsa Barrage zone, in Khairpur district, in the frontier regions and in the inundation belt on either side of the Indus river. These tracts are ideally suited for raising forests and for management as range lands, and are at the present under the control of the Revenue Department. Arrangements for their resumption by the Forest Department are being finalised.

Irrigated Plantations

The barrage lands when afforested will form extremely valuable assets. The government has decided to set apart 127,000 acres of land in the Ghulam Muhammad Barrage area, 150,000 acres in the Gudu Barrage area and 25,000 acres in the Taunsa Barrage area, along with proportionate quantities of water for raising irrigated forest plantations. It has, moreover, agreed to allocate 10 % of state land and equivalent quantity of water in all other irrigation projects for raising forest plantations. When established these forests will go a long way in meeting the country's fuel, timber and industrial needs.

A development scheme for afforesting 32,661 acres of barren land over a period of 10 years in the Ghulam Muhammad Barrage zone was sanctioned by the provincial government, with a 50 % contribution from the central government. The land is being developed and laid out and the target area of 3,000 acres for the current year will be planted by the end of the current planting season.

Land and water for this purpose has been allocated in the Gudu, Sukkur, Taunsa and Ghulam Muhammad barrages. Schemes covering 150,000 acres, 50,000 acres, 25,000 acres and 127,000 acres, respectively in these projects were submitted to the Planning Commission for inclusion in the Second Five-Year Plan. These schemes have been approved in principle and their implementation will commence in early 1960. Meanwhile it is contemplated to start work in an additional 70,000 acres in the Ghulam Muhammad Barrage zone at a cost of Rs. 300,000.

Dry Zone Afforestation

Dry zone afforestation is being carried out in denuded state waste lands of the upland districts of the Rawalpindi division. These lands have been subject to unregulated felling, lopping and grazing, and have been rendered bare during the last 50 to 100 years. It is proposed to revegetate these lands, and thus to arrest the erosion of soil and to augment fuel and fodder supply of this poor tract. Re-afforestation is being done under a centrally-aided scheme which will cover another area of 105,150 acres in these districts during the next four years. An area of 17,350 acres has already been re-afforested.

General Plantations

In view of the limited land and water resources of the country, efforts are being made to utilize the government lands lying vacant along canals, roads and railways for raising tree plantations. Strips of land measuring 57,900 acres and 900 running miles along the main and branch canals have been taken up by the Forest Department for planting.

A scheme for planting up the entire canal system in West Pakistan measuring about 35,600 miles, within the next 10 years, has been put up to the Planning Commission. The scheme has been approved in principle and its implementation will start in 1960.

Roadside Plantations

It has been decided to hand over the planting of all the roads of the Buildings and Roads Department in the province to the Forest Department gradually. To begin with, the 200-mile long Wagah-Peshawar Grand Trunk Road and 1,500 miles of roads of the Buildings and Roads Department lying in the districts of Dera Ismail Khan, Dera Ghazi Khan, Mianwali and Muzaffargarh have been handed over to the department during the year under review.

The planting of the Grand Trunk Road was started in February 1959 under a two-year scheme aided by the central government. A length of 85 miles on both sides and 80 miles on one side have been successfully planted during a period of about 6 months against the target figure of 125 miles which had to be planted during the year. The rest of the strips *i. e.*, 35 miles, out of the total plantable length of 200 miles, will be planted during the current year.

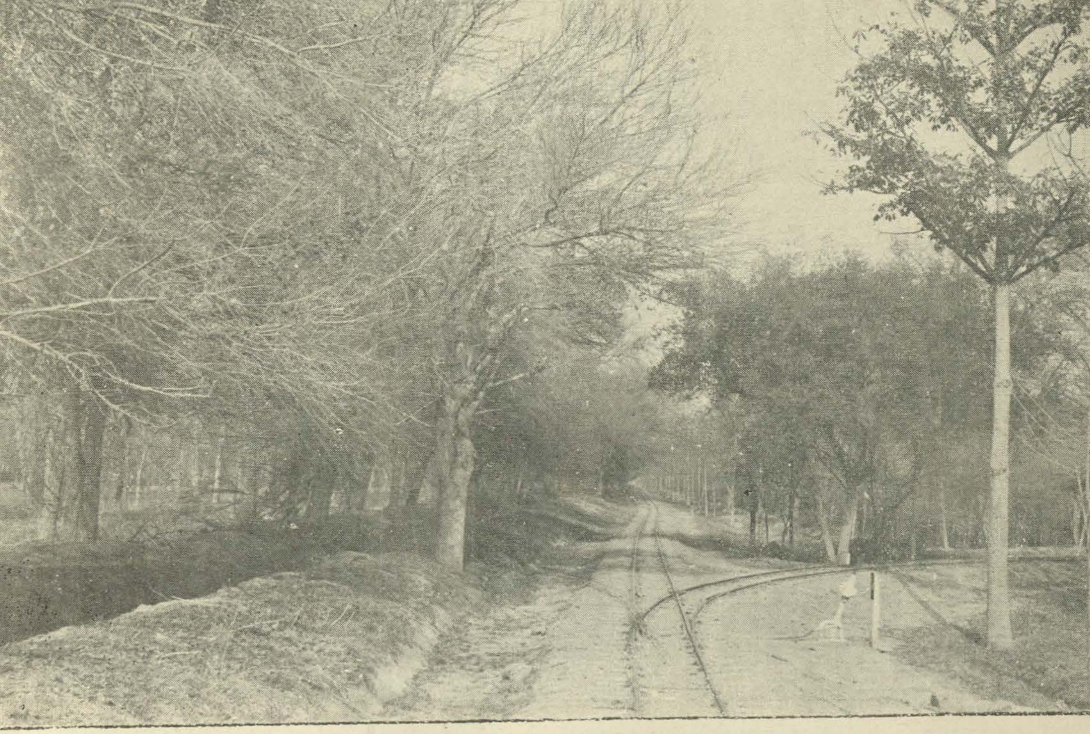
Schemes for planting the rest of the roads of the Buildings and Roads Department measuring approximately 18,000 miles in length have been approved by the Plannnig Commission and their execution will start in 1960.

Railway Planting

A pilot centrally-aided scheme for afforesting the land strips along 13 miles of railway track over a period of 5 years was sanctioned in the Multan Forest Circle. Afforestation operations have been completed over the entire stretch of 12½ miles between Chichawatni and Khanewal. Planting of the rest of the track will be taken up after judging the results of this pilot project. The object underlying this operation, besides the production of timber and firewood, is to exclude the dust devil from rail travel on the main line and to give a better look to the railway track.

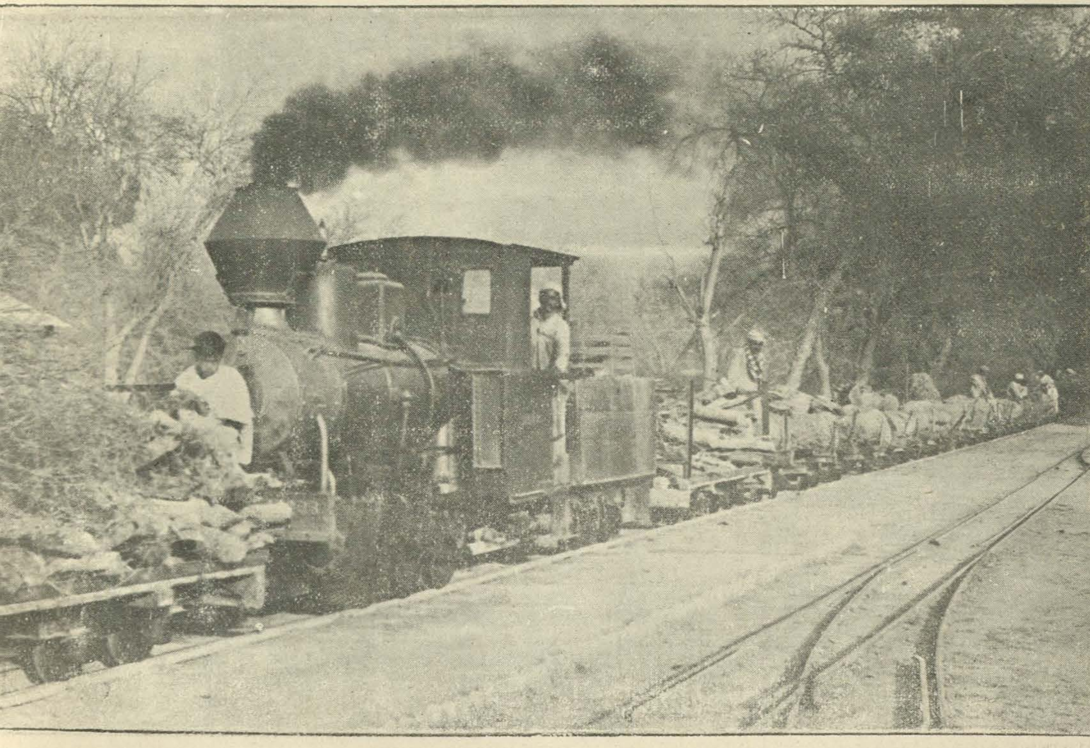
Forest Exploitation and Utilization

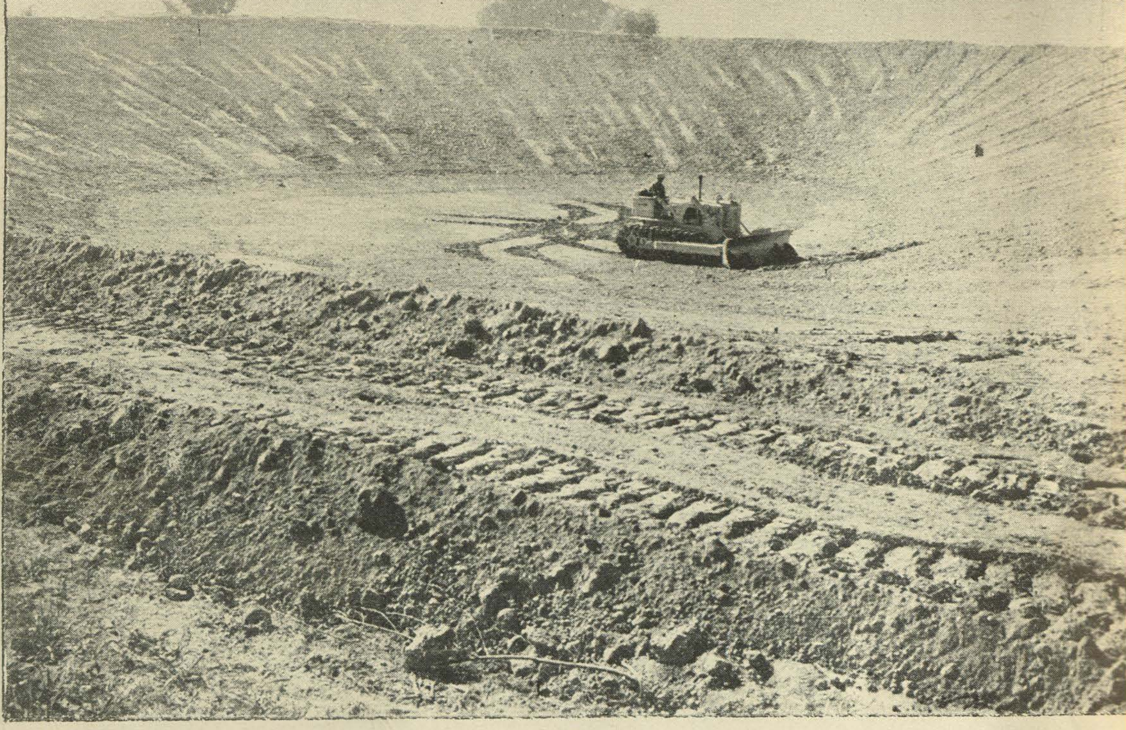
The state forests in West Pakistan have yielded huge quantites of major and minor products worth over Rs. 157 million since independence.



A view of the Chhanga Manga forest plantation. This is one of the biggest man-made irrigated forests in the world

This small railway helps to transport timber in the Chhanga Manga forest plantation





One of the water reservoirs under construction to fight soil erosion in Rawalpindi district

Sturdy young trees in one of the many irrigated forests in West Pakistan



The output of various products is given below :—

Produce	Total 1947 to 1958	During current year
Timber ..	50,000,000 cft. solid	3,493,350 cft.
Firewood ..	326,000,000 cft.	19,404,800 cft.
Resin ..	600,000 mds	153,000 mds
Ephedra ..	279,429 mds	25,000 mds
Mazri ..	Not available	50,000 mds
Juniper berries ..	Not available	1,286 mds

It will be noticed that the yield of almost all the produce has exceeded the annual average as a result of more efficient and thorough exploitation.

Resin extracted from the pine trees is the most important minor forest product. This resin is supplied to the Government Jallo Rosin and Turpentine Factory at Lahore and the P.I.D.C. Rosin and Turpentine Factory at Haripur. The current year's yield of 153,000 maunds is the highest since independence. Turpentine and rosin produced in the two factories feed scores of industries in the country, and huge sums of foreign exchange are saved. The major industries benefiting from the production of rosin and turpentine are the soap, the paints and varnish, and the boot polish industries. The Jallo factory managed by the Forest Department has produced 141,100 gallons of turpentine and 66,300 maunds of rosin during the year, against the previous year's output of 109,800 gallons and 43,500 maunds respectively.

Mazri leaves feed a number of very important cottage industries in the backward areas of the Dera Ismail Khan, Peshawar and Quetta divisions. These fibrous leaves are used for the manufacture of strings, baskets, mats and brooms. Every maund of mazri leaf when processed for these industries yields about Rs. 20 in the form of wages to the local workers.

The quantities of various products are likely to go up further as a result of the scientific exploitation of *guzara* forests in the Rawalpindi division, the forests in the merged areas of the Hazara district, forests of the tribal agencies, the frontier states' forests and the Karachi coastal zone forests. These forests are being resumed by the department for scientific management.

A centrally-aided scheme covering an area of 761,600 acres and spread over 5 years is in execution for the exploitation of coastal forests near Karachi. Huge quantities of timber and firewood will be yielded by these forests every year when the scheme gets into full operation.

Soil Conservation

The Soil Conservation Project which started in 1954 carried out soil conservation measures in demonstration areas covering 182,252 acres in the Rawalpindi, Attock, Jhelum, Gujrat, Mianwali, Shahpur, Mardan and Quetta districts. Contour terraces, crop

rotation cultivation pattern, management of waste lands and fertilization practices best suited to the respective areas have been evolved and demonstrated to the farmers in general. These practices have increased the crop yields by 50 to 100% after the stabilisation of the soil and conservation of rain water. Cumulative incidence of various operations covers an area of 34,000 acres.

The research, training and demonstration stage of the project has been successful. It is, therefore, proposed to organize the extension wing of the project as well to cover the entire province. A scheme for the extension service has been approved by the Planning Commission for the Second Five-Year Plan. A scheme for provision of a soil conservation training wing in the Pakistan Forest College for training the staff required for the extension service has also been approved by the commission. Implementation of both these schemes is expected to start in 1960.

Two other vegetation conservation schemes, covering 2,125 square miles of arid hills in the Kohistan tract and 13,100 square miles of sandy desert in the Registan tract, were sanctioned some time ago and are expected to be executed shortly. Scientific management of these vast tracts of land will arrest the erosion of top soil and produce huge quantities of forage required so badly for our livestock industry.

Range Improvement

The Range and Pasture Improvement Project was started in the Quetta division in 1954. The object of the scheme is to test and demonstrate techniques for rehabilitating denuded and deteriorated range lands. The scheme extends over an area of 200,000 acres in Maslakh (Quetta district) Yateabad (Loralai district) and Dasht Badu (Kalat district).

The pastures have responded spectacularly to the treatment and have shown vast improvement. A part of the project area was thrown open to controlled grazing by 90 sheep obtained from the Animal Husbandry Department in January 1959. The project has thus entered its second phase of utilization and was particularly admired by the President of Pakistan when he visited the site last May.

In view of the acute shortage of fodder in the country, a pasture improvement scheme which aims at establishing 12 demonstration areas of 5,000 to 25,000 acres each spread all over the province, has been approved in principle.

Research and Education

At the time of independence the research organisation was poorly manned. The research divisions have, however, been developed and reorganized since the integration of West Pakistan. These divisions have studied the silvicultural aspects of indigenous species, developed new propagation techniques, introduced some useful

species of poplar and eucalyptus, and compiled the growth statistics for Acacia Arabica.

Bidi-leaf tree has been successfully introduced in irrigated plantations of the Hyderabad civil division. The plantation will be extended gradually in order to stop the import of bidi leaf from India.

The Ghoragali Forest School functioned efficiently during the year and trained 60 students in the forester's course. A new forest school was opened at Bahawalpur in May 1959 to train forest officials below the rank of forest ranger for the southern zone of West Pakistan. The school has been opened under a centrally-aided scheme spread over a period of 5 years commencing from 1958-59.

Nurseries

As a result of the enlarged afforestation activities, the existing nurseries fell short of the planting requirements. A scheme for raising tree nurseries was sanctioned during the year. The implementation of the scheme started in February 1959, and an area of 2,000 acres has already been put under nurseries. It is a 3-year scheme and plans to grow nurseries over an area of 4,000 acres.

Tree Planting Campaigns

Three tree-planting campaigns were organised during the year. Planting ceremonies were arranged all over the province and intensive publicity was carried out through films, posters and newspapers to evoke interest among the public. The services of Village-AID workers were fully utilised for this purpose. In all, 3,948,086 plants were distributed among the public and government departments during the first two campaigns. The third campaign was organised from 7th to 13th August 1959, and its success can be imagined from the fact that over one million plants were distributed in the Lahore circle alone.

ANIMAL HUSBANDRY

Livestock is a multipurpose wealth. From time immemorial animals have been great helpers of man. They are sources of milk, butter and other dairy products and meat. In Pakistan they are also harnessed to ploughing implements and transport, without which our basically agricultural economy would come to a stand-still. They yield wool and hair, which are shaped to decorate our wardrobes. And that is not the end of the story; their skins and hides, their blood and dung, and their bones and horns give derivatives which even a rapidly progressing community like ours can ill-afford to dispense with. Their care, therefore, demands the greatest attention.

The Department of Animal Husbandry is charged with this function which, broadly speaking, has two aspects. One is the preservation and expansion of the existing stock, while the other is the evolution and multiplication of new and better strains. To that end in view, the department employs veterinary treatment, preventive measures, maintenance of pedigree animals as a foundation stock for breeding, cross-and inter-breeding, and artificial insemination as the main instruments of action. Since these methods require constant review and exploration in our scientific age, research and education in the various branches of animal husbandry receive due care. Although the resources of the province cannot keep up with the requirements in the field of animal husbandry, every nerve has been strained to give the department its proper importance, and as a result the first provincial budget after the Revolution of 7th October 1958 provides the department with a sum of Rs. 11,229,400 for the financial year 1959-60, as against a revised estimate of Rs. 9,280,000 provided in the budget for 1958-59.

Veterinary Treatment

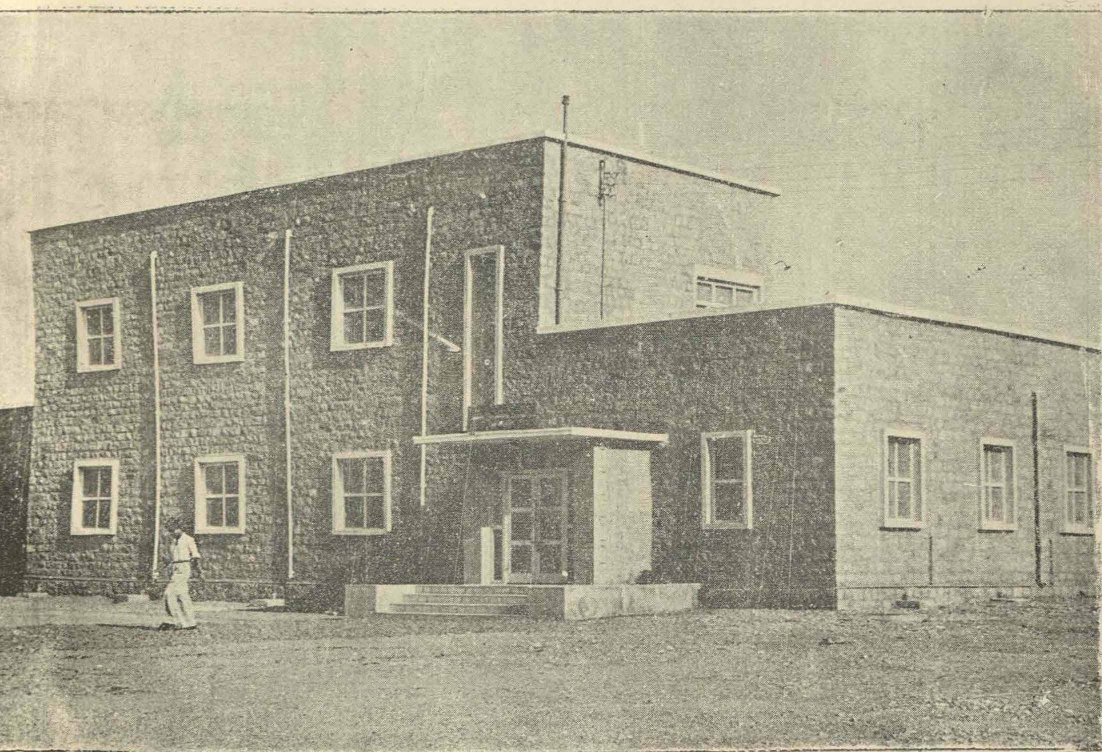
The Animal Husbandry Department maintains 414 veterinary hospitals and 235 veterinary dispensaries in the province at an annual cost of Rs. 500,000. New hospitals are being opened at Mekran and Kharan, and a sum of Rs. 25,480 has been included in the budget for 1959-60. These hospitals and dispensaries administer outdoor and indoor treatment, distribute medicines to owners of animal, give advice in animal husbandry and render other assistance.

Since the shortage of funds and technical personnel prevents an immediate increase in this number to cater for the full requirements of West Pakistan, it is proposed to have mobile dispensaries which can also



A newly constructed poultry farm of the Animal Husbandry Department in Quetta

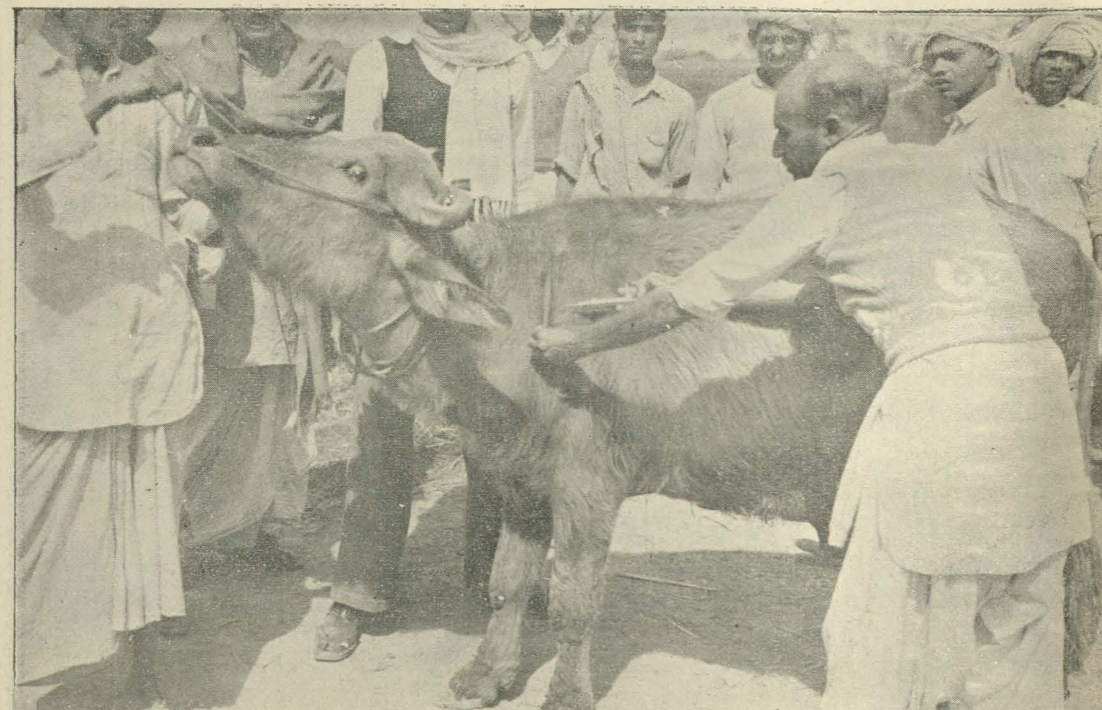
The Animal Husbandry experimental laboratory at Jam Shoro





Cattle at a farm of the Animal Husbandry Department. New farms are being started to promote better breeds of cattle

A young buffalo is being inoculated during one of the many anti-epidemic campaigns of the Animal Husbandry Department



reach the farthest corners of the province and thus bring veterinary benefits right at the door of the owners who are generally apathetic. A non-re-curring amount of Rs. 47,000 has been earmarked for this purpose.

New Hospitals

Thirteen additional hospitals are to be established during the current year under a scheme for prevention, control and eradication of infectious diseases which wreak havoc among our animal population. The ultimate aim is to eliminate infectious diseases altogether. The task is stupendous but a beginning is being made and a provision of Rs. 122,000 has been budgeted for. This scheme is apart from the scheme for investigation into, and treatment of, parasites in poultry, which is to cost Rs. 36,000 as non-recurring expenditure a year.

The protection of poultry is also carried out through another scheme for prevention of the spread of diseases by mass vaccination at government farms and villages.

There is another scheme for the creation of a 10-mile deep disease-free zone along the border with India, as one of the major causes of the spread of diseases among the provincial stocks is the contraction of diseases from animals across the border.

Vaccines and Sera

The Biological Products Section of the College of Animal Husbandry at Lahore is being modernised and is to shift shortly to a building in the Tunis Poultry Farm, Lahore. The production of vaccines and sera in government laboratories during the year was 82,800,000 doses. That makes West Pakistan self-sufficient in its requirements of biological products.

During the year, 2,588,000 vaccinations and inoculations were performed and 1,092,000 goats and sheep drenched. This is in addition to the large number of animals treated by the veterinary hospitals and dispensaries and under special schemes.

The department recently carried out a useful experiment under the direction of one of its experts, of inoculating practically the whole cattle and poultry population in the Lahore district. This was done as an exploratory measure in order to assess the possibility of extending such campaigns to other districts also, so that in the long run the whole animal population of the province can be protected. In this drive, 93,180 inoculations on poultry birds and 734,840 inoculations on other animals were performed in a matter of three weeks. The success of the drive can imagined from the fact that there are more than 199,700 birds and 495,500 cattle in the district. The results

obtained are being analysed for chalking out the future programme.

A veterinary medical store has been set up by the department at Lahore. It stocks all the necessary drugs and insecticides, particularly of foreign origin, for purveying to the needs of the department and has relieved the latter largely of its dependence on other supplying agencies. The existing diagnostic laboratories are also being modernised.

Preventive Measures

Apart from the schemes and measures of preventive nature described above, the department administers some statutory laws which enable it to act swiftly and effectively in times of emergencies. Some of these laws, inherited from the old administrations are being revised, improved upon and consolidated in order to bring them in line with the demands of existing conditions. Much headway has been made in this direction.

A new step forward in the realm of animal husbandry legislation is the promulgation of an anti-goat law in the form of the West Pakistan Goats (Restriction) Ordinance of 1959. Goats are a nuisance in many ways; they are particularly to blame for denuding the hillsides of vegetation and giving rise to large-scale erosion. They not only destroy the existing greenery but also render the land useless for future growth. It is for very good reason, therefore that the President, General Muhammad Ayub Khan, has given us the slogan "kill the goat first". Realising the evil effects of goat-breeding, many progressive countries have already eliminated this animal through legislative measures. The ordinance empowers the government to regulate grazing, pasturing, and maintenance of goats. The goats will be eliminated according to a realistic plan gradually and in various areas notified from time to time.

Breeding Operations

As already pointed out, the main purpose of breeding operations is to maintain and to expand the existing stocks and to evolve and multiply new and better varieties and provide top class stock for private breeders. A continuous process of research is in operation and the results are being gradually put into practice. The livestock and poultry farms maintained by the department are the centres where this work is being carried on. Rupees 4,605,000 have been set apart for this purpose for 1959-60. Budgetary allocations for 1958-59 were Rs. 3,148,000. The department has ensured that the farms are located in the home districts of the respective breeds of animals, so that they are bred in their natural environments.

At present, seven heavy animal farms and three poultry farms exist in the province. These figures exclude

the number of small, subsidiary or private farms which are no less important.

The cattle farms are the Nili Buffalo Farm at Bahadurnagar in the Montgomery district; the Sahiwal Cattle Farm in the Montgomery district; the Sahiwal Cattle Farm in the Multan district; the Red Sindhi Cattle Farm at Mirpurkhas; the Tharparkar Cattle Farm at Nabisar, and the Bhagnari Cattle Farm at Dadu; and the Commonwealth Livestock Farm in the Thal. In addition, there are the Lohi Sheep Farm at Bahadurnagar; the Lohi Sheep Farm at Qadirabad; and the Jaba Sheep Farm in the Hazara district. A cattle farm for the Dajal breed has been recently opened in the Dera Ghazi Khan district.

The Hariana Cattle Farm in Bahawalpur is being revived with an idea to maintain the purity of this breed. Along with this, a nucleus herd of Nili milch buffaloes and a stock of 1,000 Baluchi sheep, which is eminently suited to the area in view of the results derived from field operations, will also be maintained at the farm. Rupees 388,000 have been made available for undertaking this work. The Nili breed of buffaloes is also being developed at the Commonwealth Cattle Farm in the Thal in addition to the Dhani breed.

The Bhagnari breed, famous for its draught stamina, is being developed not only at the Bhagnari Cattle Farm, Dadu, but also in the Quetta-Kalat area, its original home. A scheme for subsidising the maintenance of this breed in Quetta, which has been in operation for some time past, has been extended to cover the Kalat area too. Another scheme for having Bhagnari Cattle-*cum*-Baluchi Sheep Farm at Quetta is under implementation. This farm will bolster up the breeding of the Lohani sheep, which suits the peculiar conditions of hilly areas. The development of this breed in the Dera Ghazi Khan district is also being subsidised.

The question of giving greater fillip to the breeding of Red Sindhi cattle which is a milch-*cum*-draught animal has been engaging the attention of the department. It is proposed to take up this work on a much larger scale with the establishment of a Red Sindhi Cattle Farm over an area of 7,000 acres in the Ghulam Muhammad Barrage zone.

Sheep Breeding

Sheep are the main source of wool, in addition to their utility for mutton and hides. In the background of the prospective elimination of goats, sheep acquire all the greater significance as an all-purpose substitute of the former.

West Pakistan has 14 recognised breeds of sheep. These are either fine wool sheep or carpet wool sheep. It is visualised that the province might be divided into two sectors where one or the other type of the sheep should be bred. In such a situation the

Government Sheep Farm at Jaba in the Hazara district will act as the centre from where foundation stock for fine wool-yielding sheep will be distributed.

The department is also undertaking a study of indigenous sheep with a view to collecting information about the dynamics of wool and mutton production of these breeds. Such a study has never been made before.

Poultry Breeding

The poultry industry occupies an important place in the economic life of advanced countries. In the United States of America, poultry-keeping ranks third among agricultural occupations. The population of poultry birds in West Pakistan has been estimated at 5,770,000 and works out to 8 birds per 100 persons, whereas in Europe and America the average population of poultry birds is 300 per 100 persons.

The importance of poultry-breeding in our national life lies in the fact that the *per capita* income of our people and the rate of capital formation being very low, it offers the most suitable occupation. Moreover, it requires no large-scale investment, is easily managed in a small way and the dividends are quick in view of the rapid growth of the birds and the frequent yield of eggs.

A systematic programme of upgrading the existing poultry stock through distribution of cockerels of foreign origin in the rural and urban areas is under execution. The three poultry farms at Lahore, Quetta and Peshawar have been organised for making available improved breeds of poultry for this purpose. Subsidiary farms have also been established throughout the province. Birds for these farms are imported from Canada, Australia, the United Kingdom and the United States of America. The three main farms produce, on an average, 21,000 eggs a month each. These eggs are distributed in villages for hatching improved varieties. In addition, birds are also given away in rural areas. In return, birds of poor quality indigenous breeds are withdrawn from these areas so that there is greater and greater diffusion of quality birds.

Heat is a discouraging factor for egg production. The climatic conditions in West Pakistan, therefore, result in a virtual cessation of egg-laying during 5 to 6 months of the year. This is the main reason for reduced egg production on a commerial scale. In order to counter this situation, a scheme for opening a commercial egg production and research centre at the Veterinary Dispensary, Murree, has been prepared. It is hoped that thereby a solution for this important economic problem will be found and private interest in hilly tracts, where low incidence of disease makes for better poultry-breeding, will be stimulated. The scheme is to cost a non-recurring expenditure of Rs. 57,000 which have been made avail-

able and a beginning is being made this year.

Other Animals

Horses and donkeys are destined to continue to play an important part in the solution of our transport problems, for the simple reason that not only are the means of communication in the country underdeveloped, but also because the difficult terrain makes their expansion a substantial task. The Animal Husbandry Department has been paying due attention to the breeding of these animals.

Stallions are kept at veterinary dispensaries all over the province for mating purposes. The record of their performances is maintained and necessary care, treatment and advice is proffered to those interested. The government also sanctions grants-in-aid to the district local boards which maintain stallions.

Demand for the requirements of donkey-breeding is partly met from the Bahadurnagar Farm where donkey-breeding was initiated in 1950, and partly by purchase of donkeys from the Remount Depot of the Pakistan Army at Mona. Some camel specialists are also being maintained to look after the upkeep of camels.

Encouragement of Breeding

Local bodies and semi-official agencies are encouraged to take to breeding of cattle and other types of animals. As an incentive, grants-in-aid are given to these bodies annually. A sum of Rs. 263,000 has been included in the current year's budget for this purpose.

As a measure to arouse interest and popularise breeding, cattle, horse, and poultry shows are held regularly in different parts of the province. Successful owners are awarded cash and other prizes. This year, Rs. 114,000 will be given away as prizes to private owners.

As natural means of improved breeding are not sufficiently available, centres for artificial insemination have been set up at Lahore, Sargodha, Bahadurnagar, Chakwal, Hyderabad and in the Ghulam Muhammad Barrage area.

Research and Education

The main centre of co-ordinated research and education in animal husbandry sciences is the Government College for Animal Husbandry, Lahore. Its admission capacity was raised from 80 to 184 students in 1956. Sixty scholarships of Rs. 60 per month each and tenable for the full duration of the degree course of 4½ years were sanctioned in addition to the usual number of scholarships. More scholarships are proposed to be sanctioned during the current year. The provision for this purpose has been increased to Rs. 162,000 during the current year, a rise of Rs. 92,000 over last year's figure.

It has been decided this year that those who have passed the F.Sc. examination should be allowed to graduate in 3½ years while matriculates

will continue to put in $4\frac{1}{2}$ years. Preference is given to the former category so that the out-put of graduates is accelerated. It is, moreover, envisaged to start post-graduate classes in animal husbandry sciences with an eye to producing specialists in the various fields. Prospects for the establishment of a separate Animal Husbandry University under the Colombo Plan are being examined.

A scheme for award of research fellowships in animal husbandry and veterinary sciences has been sanctioned by the Food and Agriculture Council of Pakistan and the Government of West Pakistan. It is being implemented shortly.

Nineteen research schemes have been put into operation by the department in collaboration with the Food and Agriculture Council, the International Co-operation Agency of America, the Panjab University and the State College of Washington. Services of six foreign experts have been obtained, and 11 officials of the department have been sent abroad for specialised training.

Research stations for artificial insemination and diary technology have been opened at the College of Animal Husbandry, and a foreign expert is heading these stations. Research on important livestock diseases is also in progress at the college where additional lecture theatres, laboratories and allied buildings are under construction.

Under a scheme for research in animal nutrition, cheap but effective rations for cattle and poultry have been worked out. These rations are composed of such industrial by-products which practically go waste. Once these rations become customary the problem of the dearth of fodder will have been solved to a considerable extent and at the same time pressure on food-grains as a material for fodder will have been reduced.

Dairying is being popularised by holding practical demonstrations, exhibitions and by disseminating technical knowledge. The Dairy Development Section renders advisory assistance to the public and the local bodies. Every possible help is given in the installation of private dairy farms on modern lines. Students of the Animal Husbandry College are also given practical training in modern dairying methods and techniques.

A Progress and Planning Officer is being appointed at the headquarters office of the Animal Husbandry Department. He will be primarily responsible for rationalising the activities of the various wings of the department.

BUILDINGS AND ROADS

The Buildings and Roads Department undertakes the construction and maintenance of all highways and government buildings in the province. A list of works executed by it since independence is a long and imposing one. Apart from the provision of road communication facilities, the requirements of all the departments are catered for, and consequently the range of work is fairly extensive: it may be the designing and construction of an office, a satellite town, a drainage or a water-supply system, a school, a college, a laboratory or a hostel, a hospital or a dispensary, a police station or a house for an official.

It is imperative to have an ever greater number of such institutions and a wider network of roads as the concept of national development grows into a physical reality; as a matter of fact progress without them is simply unimaginable. After independence the shift from a merely law-and-order regime to a welfare state presupposed vast extension of medical and educational and road communication facilities, and, therefore, heavy demands were made on the department which has since built a number of hospitals, schools and colleges and roads. The budgetary allocations of the beneficent departments have been swelling, which means more responsibility for the Buildings and Roads Department, in as much as the designing, construction and repair work of the buildings is concerned. With integration, whose underlying object was to bring the underdeveloped areas in line with the comparatively advanced ones and then to effect a homogeneous development, the volume of work increased. And on assumption of office by the new regime the implementation of projects all over was speeded up.

For One-Unit Staff

The department was called upon to build housing and official accommodation at various places in the province in order to ease the congestion created by the establishment of the West Pakistan province. Rupees 30·72 million were spent on constructing such buildings at Lahore, Bahawalpur, Peshawar, Quetta, Kalat, Hyderabad, Multan, Sukkur and other district and divisional headquarters. Most of these schemes were completed in record time.

A large staff had to be transferred to Lahore when the secretariats from various provincial and state headquarters were shifted here, and as a direct result of this influx the city faced an acute problem in respect of residential and office accommodation. Therefore, two additional blocks in the Roberts Club, situated in the vicinity of the old secretariat, were constructed

within one year—the work was taken in hand on 16th March 1958 and completed on 24th February 1959. The blocks contain, *inter alia*, six rooms for Secretaries and Deputy Secretaries and 16 rooms for Section Officers and have cost Rs. 330,000. More accommodation is being provided in the Civil Secretariat at a cost of Rs. 580,000. For junior officers 26 houses were constructed. This involved an expenditure of Rs. 1,500,000.

The one-unit staff colony at Bahawalpur consisting of 200 quarters has been completed; another colony for officers, also at Bahawalpur, is nearing completion. These projects will cost Rs. 3,371,000. To house various government offices at Quetta, a building costing Rs. 1,500,000 was constructed. Besides, a residence for the Commissioner, 18 bungalows and 230 quarters for staff were completed at a cost of Rs. 3,200,000. Also built are 40 quarters for accommodating one-unit staff at Multan.

Some time ago it was decided to set up a district township at Thatta comprising four units, one for government buildings and the rest for the public. The first phase of the scheme for the government colony involving a cost of Rs. 3 million is almost over. At Hyderabad, Rs. 630,000 were spent on the construction of a building for one-unit officers.

Satellite Towns

Various satellite town schemes have either been completed or are under execution to relieve congestion in the cities which has assumed serious proportions as a consequence of the rise in population and the arrival of refugees. Under this programme an 1,800-quarter colony on the Samundri Road, Lyallpur, is nearing completion. A large number of houses has been completed in every respect, including the sanitary fittings and water-supply arrangements, and some of them have been handed over to the Rehabilitation Department for settling displaced persons. In the remaining quarters only sanitary installations need fitting which is being done.

At Shah Latifabad a satellite town scheme, which on completion will provide shelter to 60,000 to 70,000 persons, is under implementation. Already, over Rs. 10 million have been spent out of a total estimated expenditure of Rs. 18·2 million. Provision has been made for the construction of roads, water-supply, drainage and lighting systems. Aside from this project, 4,000 quarters have been constructed and allotted on a hire-purchase basis. Work is in progress on the satellite town, Mirpurkhas. At a cost of about Rs. 100,000, seventy D-type quarters were constructed at Multan.

Water Supply and Drainage

A huge water-supply scheme, which is in progress at Hyderabad and Shah Latifabad, will be completed in the near future. Another scheme for the drainage of these towns has been prepared. An overhead reservior of 50,000 gallons' capacity has been completed in the Ghulam Muhammadabad Colony,

Lyallpur. The main sewerage work has been equipped with proper machinery. At Vehari, a water-supply scheme has been completed at an expenditure of Rs. 240,000.

Educational Institutions

A regular feature of the department's activities is to undertake the construction of educational institutions of the government, and at present work on a large number is at various stages of progress. Recently expanded is the normal school at Kamalia (one of the three in the former Punjab), at an expenditure of more than Rs. 100,000. With the extension of the Village-AID Programme the number of workers to be trained at the institutes increased, and an accommodation shortage was felt at the Peshawar and Lyallpur institutes. Besides improvements in the existing institutes, additional accommodation has been provided at Peshawar at a cost of Rs. 1,170,000, and at Lyallpur at Rs. 320,000. An intermediate college for girls and a laboratory and a hostel for the Government College at Quetta have been built. Expenditure on the works respectively is Rs. 540,000 and Rs. 410,000. To develop a martial spirit in the people of the southern zone, the government decided to set up a cadet college at Petaro, 27 miles north of Hyderabad. The construction began in December and is expected to be over by the end of this year.

An ambitious project of constructing an engineering college at Hyderabad is under implementation at an estimated cost of Rs. 10·1 million. Work is also in hand at a large number of places such as the Arts College, Larkana; Mumtaz College, Khairpur; technical institutes at Khairpur and Hyderabad; government high schools at Khura, Kandhkot, Dadu, Tando Jan Muhammad, Matli and Bhagh; high schools and hostels at Sanghar; and a girls high school and hostel at Sukkur.

Badshahi Masque

Attempts had been made in the past to repair the Badshahi Mosque constructed in 1673-74 by the Mughal Emperor, Aurangzeb. But it was not until 1934 that work began in right earnest, which was again interrupted on independence owing to various reasons: non-availability of material and lack of craftsmen to work on red sandstone and white marble. In 1954 the Buildings and Roads Department resumed the renovation in an organised manner. This work is expected to be completed by the middle of next year at an estimated cost of about Rs. 3 million. Although modern facilities are being provided the old shape of things is being preserved and restored with the assistance of the Archaeological Department. An important change, however, will be an ablution chamber in place of the open tank which stands in the middle of the courtyard and which will be converted into an acquarium with a marble lattice railing around it. All around the mosque will be laid a

green bed in the classical pattern of Mughal gardens. The whole mosque has been electrified, and loud-speakers, sanitary fittings and a tube-well have been installed.

A mosque with marble flooring, skirting and arches and embellished with other ornamental and architectural touches has been built in the Governor's House, Lahore.

Medical Institutions

In view of its dilapidated condition the old hostel building for girl students of the King Edward Medical College, Lahore, was demolished and a new one having an accommodation for 26 students was constructed. The amount spent was Rs. 112,000. The work was completed last December in less than a year. A one-unit hospital for government servants is being built at Lahore at an estimated cost of Rs. 1·82 million. The Liaquat Medical College and Hospital is expected to be completed by the end of next year. The Fatima Jinnah T. B. Sanitorium, Quetta, has been expanded, and Rs. 630,000 have been spent on it. A mental hospital in the Hazara district, which will cost Rs. 4,360,000, is being built.

The Social Welfare Wing of the Buildings and Roads Department is carrying out numerous works of local bodies and the Village-AID Department in various parts of the province.

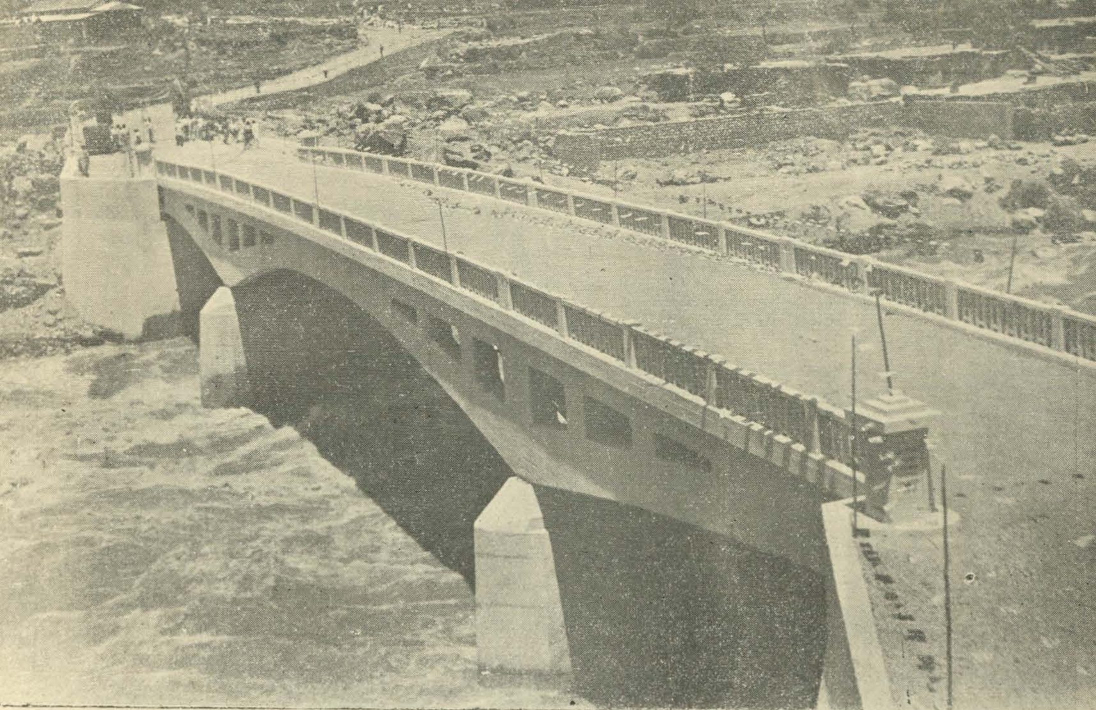
Roads

To the 4,982-mile network of metalled roads acquired by the former provinces and states on independence, 3,708 miles of metalled roads have been added in the course of 12 years. Out of this, a mileage of 280 black-top roads was constructed during 1958-59. Now the province has 8,690 miles of metalled roads. Similarly, the mileage of unmetalled roads has increased from 6,476 on independence to 10,902 today.

In 1955, the department prepared a five-year road construction plan in consultation with the Planning Board. It stipulated an addition of 2,266 miles of new roads and an improvement of 2,303 miles at a cost of Rs. 140 million and Rs. 158 million respectively. But in view of the budgetary provisions which were not adequate to undertake such an ambitious programme, the pace of construction and improvement had to be adjusted, and it is expected that by 1959-60, the last year of the plan period, 1,247 miles of new roads will have been built and 1,216 miles of improvement will have been effected. The total expenditure will be Rs. 200 million.

Balakot Bridge

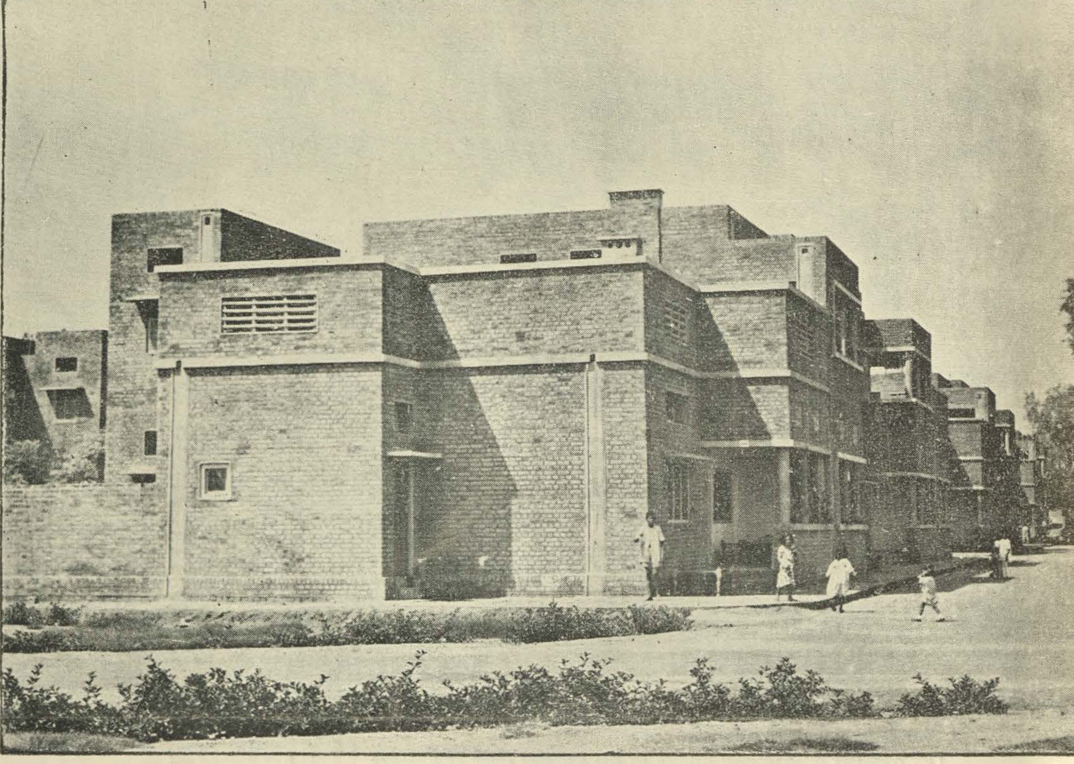
The construction of the Balakot bridge, whose opening ceremony was performed by President Ayub on 8th June 1959, has enabled cars, buses and trucks to go up to Paras, as far as 18 miles in the Kaghan Valley. The bridge and its approaches which have cost Rs. 717,000 form part of a master plan drawn up by the Buildings and Roads Department for the development of the valley. The plan involves an



The recently opened new bridge on the Kunhar river at Balakot. This has helped all types of traffic to proceed to the Kaghan Valley

The Buildings and Roads Department maintains an excellent boat-bridge over River Indus near Dera Ismail Khan





Quarters built in Lahore for clerical staff arriving from various provincial and state units

Craftsmen shaping marble slabs for the prayer chamber of the Badshahi Mosque, Lahore. Repair work by the Buildings and Roads Department has been universally commended



expenditure of Rs. 13,615,100.

A 2,100-foot road bridge with a maximum height of 24 feet above the rail level has been built at Tariqabad (on the Lyallpur-Lahore road *via* Jaranwala) in order to avoid frequent and long hold-ups in traffic because the road passed through a level crossing which fell within the shunting limits of the Lyallpur railway station. The staff worked round the clock and finished the bridge within a year, as against the stipulated period of a year and a half. The un-metalled portion of the Montgomery-Jhang road, *i.e.* between Gojra and Jhang, has been metalled at a cost of Rs. 471,400.

The main highways on which work is going on are as follows :—

(1) Karachi-Lahore-Peshawar Road (West Pakistan Highway).

(2) Karachi-Kashmore-Dera Ghazi Khan-Dera Ismail Khan Road (Indus Highway).

(3) Karachi-Kalat-Quetta Road.

(4) Jhelum-Pind Dadan Khan, Road.

(5) Multan-Bahawalpur Road.

(6) Sujawal-Badin Road.

Hazara Trunk Road

Rupees 883,440 have been allocated to be spent during the current financial year on widening the black-top portion of the Hazara Trunk Road from Hasan Abdal to Abbottabad, in view of the fact that the West Pakistan Government has decided to make Abbottabad its auxiliary capital. The present road is 12 feet wide, except for three miles near Abbotabad, and it is presumed that after the implementation of the decision there will be much greater traffic on the road and the present width will not be able to cope with it. Hence the above grant.

Certain portions of the Grand Trunk Road lie within the reach of floods. For the worst portion in this regard, *viz.* near Jhelum, Rs. 272,000 will be spent this year on the construction of bridges and culverts. The Lahore-Multan road will be widened at certain places at a cost of Rs. 500,000.

ROAD TRANSPORT

The past year witnessed a progressively marked expansion of the road transport services operating in the province. Notwithstanding the serious draw-back of a comparatively small allocation of foreign exchange to the West Pakistan Road Transport Board, the strength of its fleets was appreciably increased, and as a consequence about fourteen million and a half more passengers travelled by government buses.

At present 1,428 vehicles are plying in the six units (the Provincial Transport Services, Peshawar, Rawalpindi, Lyallpur, Dera Ghazi Khan and Hyderabad, and the Lahore Omnibus Service) into which the entire road transport system has been divided. The strength of the fleet in 1957-58 was 1,143 and in the preceding year 1,041.

Genesis

Before undertaking a review of the activities of the Road Transport Board, it would be fitting to recapitulate, briefly, the origin of the state-owned transport service in the province. It was in the year 1945 that the former Punjab Government passed legislation to set up a Transport Department in order to regulate private enterprise in the field and run passenger buses on national highways. Two services, one at Rawalpindi and the other at Lahore, were instituted the same year in April and September respectively. Despite the modest start, the results encouraged the government to spread the state-owned transport system to other parts also, and two more services were started—at Dera Ghazi Khan in March 1947 and at Lyallpur in November 1948. The former governments of the North-West Frontier and Sind provinces followed the lead and established the Government Transport Service, Peshawar, and the Sind Road Transport in November 1947 and June 1948 respectively.

The next development was the establishment of Road Transport Boards in the three provinces in the beginning of 1952. The government-run services having established their utility in respect of affording greater convenience to the travelling public, the ultimate purpose visualised was the total nationalisation of passenger road transport within five years. However, the import restrictions imposed as a consequence of meagre foreign exchange resources compelled the boards to postpone the putting into effect of this idea, and the nationalisation process was thus markedly slowed down.

West Pakistan Road Transport Board

As a natural corollary to the establishment of the West Pakistan province, all the three semi-autonomous bodies were integrated on 15th October 1957, and the West Pakistan Road Transport Board came into being. The Khairpur Government Transport was merged into the board on 1st September 1958. The board, which consists of seven members, four of whom are nominated by the provincial government and three by the central government, has a total capital investment of Rs. 58 million, which is more than ten times the amount provided to make a beginning. Besides paying annual profits, the board gives an interest at the rate of 4 % to the central and provincial governments on their investments which are in the ratio of three to one by the two respective governments.

Over the years since the government first entered the field of road transport the number of routes covered by state services has been gradually increasing as more buses become available. Now the six transport units functioning under the control of the board are operating 373 routes. The break-down of the routes is: the Provincial Transport Service, Peshawar, 70; the Provincial Transport Service, Rawalpindi, 69; the Provincial Transport Service, Lyallpur, 74; the Provincial Transport Service, Dera Ghazi Khan, 64; the Provincial Transport Service, Hyderabad, 36; and the Omnibus Service, Lahore, 60. The services cover a daily mileage of 16,540; 17,630; 16,080; 13,920; 12,650; and 18,210. In 1958-59 the respective strength of fleet stood at 235; 226; 198; 241; 234; and 294 vehieles which carried a total 7,262,376; 8,711,018, 7,579,981; 7,640,074; 11,327,421; and 49,650,049 passengers.

Alongside this step-up in its activities, the board is steadily implementing its policy of a complete change-over from running petrol-driven to diesel-driven vehicles. To-day 1,295 vehicles, out of a total of 1,428, are run on diesel. This is being done in view of the fact that diesel is not only cheaper but also more powerful and can carry heavier loads of traffic.

Besides operating 373 routes, the units have been running excursion buses to hill resorts and to places of historical and tourist interest. The jeep service to the Kaghan Valley, which caters for tourist requirements during summer, deserves special mention. Nine break-down trucks and 10 jeeps will be purchased for the valley at a cost of Rs. 654,000 during the current financial year.

Five-Year Plan

The public demand for greater travelling facilities is indeed ever-increasing; in fact the board falls much short in meeting this demand because of shortage of vehicles. However, it is expected that the anticipated arrival of a consignment of 230 buses by the

end of 1959 will go a long way towards meeting this deficiency.

A five-year development plan ending 1965 has also been prepared. The plan, which will entail an expenditure of about Rs. 80 million on its implementation, aims at replacing 889 old vehicles and adding 650 new ones.

On the inception of the services, workshops for the repair of vehicles were also established at headquarters. As the fleets grew larger it was keenly felt that the workshops be properly equipped so that repairs of every type could be carried out. This need met, the question of totally doing away with the help of private agencies which constructed bus-bodies for the services was taken up, and body-building workshops were set up at Lahore, Peshawar and Hyderabad. They have a capacity of turning out bus-bodies of latest design at the rate of 10 per month. The board's five-year plan makes an allocation of Rs. 1,900,000 for the purchase of workshop machinery.

Government Investment

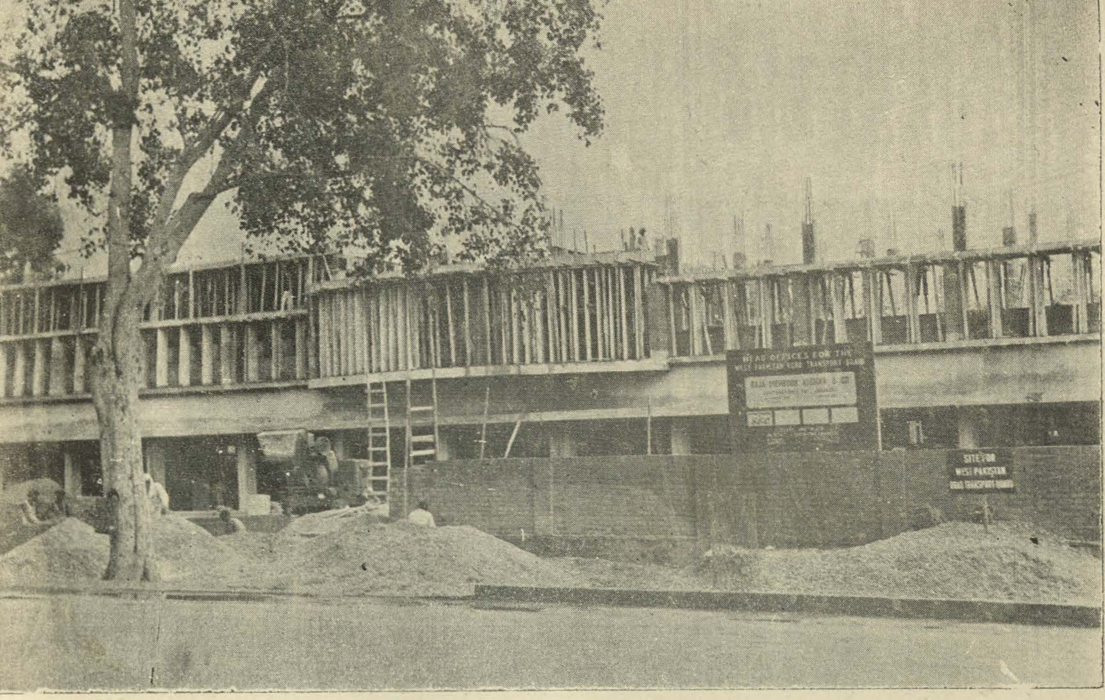
During the current financial year Rs. 5,535,000 will be spent on the replacement of 103 buses, one station wagon, two motor-cycles, five jeeps and five goods trucks. Apart from this amount, Rs. 654,000 have been earmarked for the promotion of tourism: nine break-down trucks and 10 jeeps will be provided exclusively for the Kaghan Valley. To meet the expenditure, Rs. 3,619,800 will be spent from the depreciation reserve fund, Rs. 642,300 will be given by the central government and the remaining Rs. 1,926,900 will be invested by the provincial government.

An institute established four years ago has so far trained about 2,000 drivers, conductors, checking inspectors and booking clerks. Before they are put on active duty, training in the essentials of their work is given to them: and general knowledge about transport is imparted for a period of four to six weeks. A scheme to raise the status of the institute to that of an academy where traffic managers and assistant traffic managers can get training is under consideration.

A four-storeyed building to house the headquarters of the board is under construction on Egerton Road, Lahore. It is estimated to cost Rs. 1,360,000.

Welfare

Recently, it was decided to restart the industrial school set up at Lahore for the training of womenfolk of poor employees of the board. It was closed down six months ago because of lack of response from the women. A campaign is being launched to persuade women to join the school to their own interest. This has been done to provide an opportunity to the women to learn handicrafts—like sewing and knitting—so as to enable them to supplement the income of their families. The board has appointed a qualified teacher and provided sewing machines there. These facilities are given free of charge.



The new building of the West Pakistan Road Transport Board is under construction at Lahore

A double-decker is being repaired in the Road Transport Board workshop





Aerial 'bombing' during civil defence exercises at Kasur

Firemen fight a blaze during an 'air raid' in Lahore. Such civil defence exercises are common in the province



Similar schools will be opened in other regions, if the experiment proves successful.

The 7,000 persons in the employ of the board are getting a large number of facilities such as benefits of provident fund, yearly bonus, free privilege passes and medical aid for themselves and their families. Free dispensaries under the charge of qualified doctors are functioning at every service head-quarters. The mechanical, traffic and some other categories of staff are supplied free uniforms. Financial aid is also given to low-paid staff to meet emergencies.

CIVIL DEFENCE

Civil defence is the defence of the people by the people and for the people, and for this purpose it is essential to have trained and organised services to mitigate the effects of enemy air attack on the civil population and also to combat and counter all calamities created by nature during peace-time.

The Civil Defence Department is charged with planning the part which its services would play in home defence and in co-ordinating the civil defence plans of public utility services and allied departments.

In order to ensure that in the event of an emergency the people are able to play their role confidently, efficiently and smoothly, the department has organised civil defence measures in almost all the important towns of the province.

Organization

Men of intelligence, influence, integrity and good physique are enrolled and trained to play their part in the civil defence services. Besides, various services have been raised by voluntary recruitment of citizens.

The warden service is responsible to guide and control the general public, report any damage immediately to the Controller of Civil Defence, organise immediate self-help measures and control local life-saving operations.

The main job of the rescue service is the rescue of trapped persons and rendering of first aid before the victims are transferred to hospitals.

The casualty service is responsible to render first aid to casualties at the scene of incident and to convey them to the hospitals or first aid posts for necessary medical treatment.

A fire service has been organised for supplementing the existing fire brigades and fighting small fires through stirrup-pump parties.

The communication service deals with the work of quick transmission of messages and immediate and effective control over the damage reports.

Training

Members of the civil defence services are required to undertake extensive training to enable them to carry out the duties of an ordinary member of the service to which they belong, and thereafter to undertake collective and combined training, including exercises each year.

Courses are conducted in the Provincial Civil Defence Training School, the Special Civil Defence Training Centre and the district civil defence training centres established in important towns.

Peace-Time Activities

To render appropriate and immediate assistance and to look after the victims of natural calamities like rains, epidemics, house collapses, floods and road accidents, an emergency service station has been established since 1952, where whole-time civil defence services with all necessary equipment have been stationed. On receipt of a call, the service immediately reaches the scene of incident and the parties remain on 24-hour duty. Telephone No. 2828 is maintained to receive calls if any eventuality arises, and immediate help is rendered free of cost. In addition, an ambulance service to convey sick and ailing persons to hospitals for immediate medical relief and attention has also been organized at this station. The ambulance is always available and can be hired at the rate of 8 annas a mile.

During the year under review, 21 incidents of house collapse, 11 of fire and 10 of road accidents were reported to the department. Sixty fire victims were rescued and rendered first aid on the spot and transported to hospitals for medical treatment.

During the unprecedented rains in September 1958, which caused a lot of misery to the people, the Civil Defence Department geared up all its resources at a moment's notice. Mobile units consisting of rescue vans, ambulances, country boats, jeeps and trailer pumps were despatched to the affected areas to rescue marooned people and to provide relief to the sufferers. A number of important buildings and essential commodities like food and medicines worth millions of rupees were saved, and hundreds of persons were rescued from collapsed houses. The civil defence volunteers also provided clothing and cooked food to the poor who had lost nearly all their belongings and found themselves exposed to the inclemencies of the weather.

Anti-Epidemic Drive

In order to protect the inhabitants of various affected localities in Lahore from malaria, dysentry and diaorrhea a campaign was launched by the Civil Defence Department in collaboration with the Corporation of the City of Lahore and the provincial health authorities. Thirty breeding places and 4,489 houses were disinfected with DDT and 30,660 persons were inoculated against typhoid. Similarly 1,676 tablets for treatment against malaria and dysentry were distributed among the people of rain-affected areas in the city.

POLICE FORCE AND ANTI-CORRUPTION

The law and order situation took a sudden turn for the better on the imposition of martial law and the advent of the new regime which was pledged to create conditions of peacefulness and security within the country. The provincial police had to shoulder increased responsibility and sometimes had to work round the clock to cope wtih anti-social elements against whom a relentless campaign was set going. Crime registered a steep fall as smugglers, black-marketeers, hoarders, *goondas* and other nefarious persons were rounded up and received heavy penalties from military and civil courts.

A vigorous drive was launched for the recovery of unlicensed arms which were mostly held by undesirable persons and which had led to an unhealthy rise in the rate and intensity of crime. More than 192,000 fire-arms, sten-guns among them, were surrendered by the people and collected by the police.

Expansion in the Force

Positive measures were taken by the government last year to expand the provincial police force in accordance with the increasing service needs. Industrialisation, more traffic and new townships have given rise to a host of problems which promote crime unless properly handled. The number of policemen in the province has been almost stationary for the last 25 years. Realisation of this state of affairs has prompted the government to enhance the police force.

As an immediate measure the police force in the Lahore town and district and the Lyallpur, Bahawalpur, Bahawalnagar and Rahimyarkhan towns is being reorganised and increased in three phases. A police post is being set up at Rahwali, 6 miles north of Gujranwala, where three important mills have been set up.

A Police Commission is also to be set up very shortly in order to examine the whole question of public safety, civic security and the law and order situation. It will also suggest ways and means to improve the efficacy of the police force and to make it more broad-based in its functions.

Crime Trend

There has been an all-round decline in crime in the province. During the past year, a total of 62,790 cases were reported. There were 140 cases of dacoity as compared to 257 in the previous year, 10,653 and 795 cases of burglary and robbery as compared to 11,554 and 902 respectively last year. Cases of murder and kidnapping have also shown a marked decrease. The



The mounted police exhibit their prowess at acrobatics

The police tattoo is one of the biggest attractions during the National Horse and Cattle Show held in Lahore every spring. Photo shows policemen from the tribal areas doing the sword dance





Mobile units of the traffic police giving instructions to people on the Mall in Lahore

Road safety weeks are frequently organised to make the people traffic conscious in the big towns



public responded very well to the call for co-operation with the police and rendered appreciable assistance, for which 363 *lambardars*, 216 *chowkidars* and 2,318 other persons were given cash rewards amounting to Rs. 29,000.

Tele-Communications

The tele-communication system has been very helpful in the quick disposal of important and urgent matters and in dealing with emergencies. As usual, it was called upon to do outstanding work during the very recent floods, not only as a means of flood warning but also to serve as the only means of communication when roads, railways, telegraphs and telephones were disrupted by the floods. Nine wireless stations are proposed to be set up this year in the Kalat division.

Criminal Record Office

No police force can work effectively unless it is fully acquainted with the prevailing criminal types and the general trend of crime. For this purpose huge records of past and present criminals are maintained in modern countries. A Criminal Record Office has therefore been established for the preparation of classified maps and graphs of crime; collection, co-ordination and dissemination of criminal intelligence; and for directing counter-measures by watching the trend of crime and the activities of criminals.

Forensic Science Laboratories

The two laboratories at Lahore and Peshawar are rendering valuable service in giving scientific information regarding fire-arm cases. The work has increased and the laboratory at Lahore is being expanded. During the year, 1,002 cases were examined.

Finger-Print Bureau

The bureau handled 33,720 finger-print references during the year, and its record of finger-print slips has gone up to 403,953. Identity of eight dead bodies was established by the bureau. Besides, it supplied valuable technical information on the basis of which 32 proclaimed offenders and 126 absconders and bad-characters were arrested.

Welfare

Increasing interest on the part of some public-spirited members of the Police Department has resulted in greater activity to promote the welfare of low-paid personnel and the dependents of policemen who died on duty. Arrangements have been made for providing special wards for police patients at the Samli and Dadar sanatoria and other hospitals. An amount of Rs. 40,650 has been contributed to the Benevolent Fund, and a sum of Rs. 137,135 spent on education, health and maintenance allowances to orphans and widows of policemen. Scholarships were given to 63 students to prosecute their studies.

The provincial government has provided a sum of Rs. 50,000 for the purchase of paludrine for distribution among police personnel during the malaria season.

Sports

Distinction has been achieved in the field of sports. The police won the Triangular Athletic Meet held at Lahore. One of their men was in the forefront of the team which represented Pakistan at the Asian Games in Tokyo. The police hockey, basket-ball and volley-ball teams are among the best in the country. During the year, the central government conferred the Pakistan Police Medal and other awards on 20 police officers of West Pakistan for gallantry and meritorious service.

ANTI-CORRUPTION

Corruption in the administrative machinery is a legacy inherited at the time of independence. Unfortunately, soon after independence the public sense of sacrifice and patriotism went on fading and the increase in anti-social activities was marked with a corresponding increase in corrupt practices among government officials. Instead of improving therefore, matters became worse. The former units of West Pakistan had set up agencies for the eradication of corruption and had imposed restrictions on the undesirable practices indulged in by some government servants. But these measures did not yield satisfactory results due to the political climate that prevailed before the advent of the new regime.

The present government wasted no time in grappling with this evil which was badly affecting the administration and its public functions. Positive measures have been taken to bring to book erring officials and to accord them due punishment.

New Measures

Anti-corruption laws of the various governments have been integrated and extended to the former states of Khairpur and Bahawalpur. The martial law regulations prescribe heavy penalties for corruption in all its forms. The procedure for obtaining sanction for the prosecution of accused officials has been simplified. Screening committees were formed at various levels to weed out the *incorrigibly* corrupt and inefficient and to suggest action against those whose cases were not too serious; the Public Servants Scrutiny Ordinance was promulgated for this purpose. The Anti-Corrpution Department was reorganized and expanded and a seasoned experienced officer of the rank of commissioner was appointed to head it as Director-General and Secretary to Government. It was decided to appoint special judges-*cum*-enquiry officers to try corruption cases and to institute departmental enquiries; serious cases were to be tried

by special military courts. The Anti-Corruption Board was formed to eliminate delays in dealing with cases of misconduct. No less than 2,330 officials of all ranks, including a number of highly placed and senior officers, have been either compulsorily retired for inefficiency or reputation of being corrupt, or have been demoted and otherwise punished.

The elements which served to corrupt these persons are also not being spared. Non-officials who held public offices before the new regime, including former ministers and legislators, will no more remain beyond the pale of law which is no longer fettered by their personal and political considerations. For them the Public Offices (Disqualification) Order 1959 has been promulgated and enquiries are proceeding in a large number of cases.

In order to take speedy and effective action against such persons the central government passed the Elective Bodies (Disqualification) Order 1959 on the 7th August. Under this order misconduct also includes subversive activity, action contributing to political instability, etc., or abetment of any such activity and embraces the conduct of a person since the very first day of independence. The order prescribes disqualification for guilty persons from being a member of or a candidate for the membership of any elective body till 31st December 1966.

During the past year 1,375 cases of corruption by officials were dealt with by the department in the northern, central and southern regions, out of which 349 cases were sent up for trial and 130 were recommended for departmental action. In the southern region, investigation is pending against 335 government servants, including 55 gazetted officers. Nearly 300 officials are facing trial in the southern and central regions.

PRISONS

The Government of West Pakistan has of recent years adopted a more realistic and radical policy towards prisoners by liberalising the unnecessarily rigid restrictions nd corporal punishments. Instead, the prisoners are now being treated in a manner calculated to make them useful citizens on their release.

Semi-Security and Open Jails

In order to prepare the prisoners for leading a respectable life after serving their sentences, it is necessary that a sense of responsibility be inculcated in them. For this purpose, semi-security jails with reduced watch and ward had been established at Sialkot and Multan for keeping good-conduct prisoners. In view of this successful experiment, two more semi-security jails have been started in the province at Haripur and Khairpur.

The experiment of open jails is being tried in this country for the first time, and a start has been made with an open jail at Kalri in the Thatta district. More than 2,000 acres of land have been acquired for cultivation by jail labour, and nearly 465 acres have already been brought under the plough. This will help the department in achieving self-sufficiency in food-stuffs, and make for considerable saving in expenditure. It is further proposed to start poultry, sheep-breeding, dairy farming and bee-keeping in this institution in order to train convicts in these convenient but profitable occupations.

At first the good-conduct prisoners are kept in semi-security jails for some time, and then the selected ones are passed on to the open jail in order to cultivate in their minds a sense of self-respect, self-help and responsibility. Thus, after their release, they can be hopefully counted upon to act as good citizens who understand that a life of crime is not a useful and secure life.

Education

Regular classes are held in all the jails for imparting primary education to prisoners, and whole-time teachers are engaged for this purpose. Arrangements have also been made for higher and technical education of prisoners so that they can appear in examinations like Matriculation, Intermediate, Munshi Fazil and Moulvi Fazil. Some of them are sent to attend technical schools at Lahore. Recently, 23 inmates have passed the examination in Engineering (Practical) of the City and Guilds of London Institute, and one has been offered a job of Rs. 120 per mensem by the Y. M. C. A., Lahore. Besides, 20 seats have been reserved for jail inmates in the Normal Training School, Multan.

Religious education is being imparted to prisoners, and sermons by selected persons are given for their benefit. They attend prayers regularly and in congregation. Besides, essay competitions are being held on different subjects such as patriotism and morality and on the causes and remedy of crime.

Welfare Leagues

Committees of prisoners have been set up in all the central prisons and class I district jails for affording them opportunities to help and assist the jail authorities in matters pertaining to sports, food, education and cultural activities, without interfering with the administration. Inter-regional sports tournaments of prisoners were recently held at Lahore.

Industry

Prisoners are trained in various cottage industries like spinning, weaving, dyeing, carpentry, black-smithy, pottery, *durree*, *niwar* and carpet-weaving and basket-making, so that they can easily and honestly earn their livelihood at the end of their terms of imprisonment. Jail products have always been in great demand for their fine quality, durability and low prices. New patterns and designs are being evolved and introduced to catch up with the latest market trends.

Hiring of Prison Labour

The government has decided to rent out the services of prisoners at Re. 1-8-0 per day, out of which eight annas will be credited to the account of the prisoner concerned, who will get the money after his release. Thus he will be earning even while serving his sentence, and should not find it difficult to rehabilitate himself without any outside aid. About 1,000 prisoners have been hired by the Irrigation Department in connection with the grow-more-food campaign. They are employed on cultivation work in the Ghulam Muhammad Barrage area.

Flood Relief

As usual, prisoners played their due and commendable part in restoring damaged works after the floods of autumn 1958. A camp of 569 prisoners was set up at the Marala Headworks for repairing the canals and transporting truck-loads of stone and other material at Sialkot to avert the danger to the Upper Marginal Bund when the Ravi was changing its course. The prisoners did laudable work by facing the emergency along with the army and other labour. Prison labour was also called in to meet a serious emergency which had arisen at the Kirthar canal, 16 miles from Sukkur, where breaches had occurred and had to be closed. Fifty prisoners from Sukkur jail were immediately rushed to the spot, and another party of 200 convicts reached the spot within an hour's time. It was later admitted by the engineers that the timely action of the Prisons Department and the hard work put in by the prisoners had helped to avert a great disaster.

About 100 prisoners were also sent at very short notice for repairs to the Shero Bund in the Dera Ghazi Khan district.

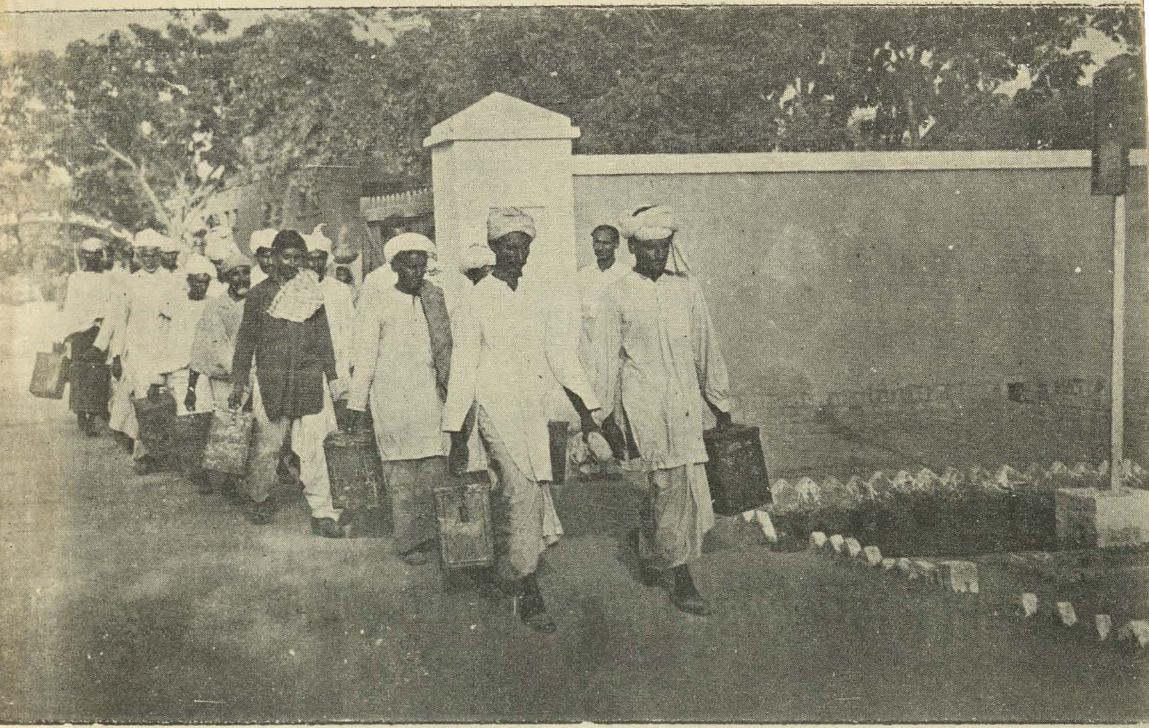
The importance of prison labour has now been realised all over on account of the fact that the Prisons Department has proved its worth by facing the hard tasks confronting it in emergencies.

Training Institution

An institution is to be established very soon for training of jail staff up to superintendent level, and also for conducting refresher courses for employees in the department.

Common Jail Manual

At present, prisoners in different regions are governed by different jail manuals, and are, therefore, being treated differently with the result that the administration of the department is also affected sometimes. It has now been decided that a common jail manual, with some adjustments for certain local areas, should be compiled so that prisoners all over West Pakistan may be treated equally. This important work will be undertaken very soon.



New arrivals at the reformatory farms at Burewala. No chains and handcuffs here

The convicts live like ordinary farmers at the reformatory farms and earn their living





A convict with his children. Families are allowed at the farms and contact with relations is encouraged

The little daughters of the convicts have a school of their own on the farms



REFORMATION OF CRIMINALS

For the prevention of crime and treatment of offenders a legislation known as the Good Conduct Prisoners Probational Release Act was enacted in 1926 in the former Punjab on the basis of the recommendations of the Indian Jails Committee (1919-20). To put this act into operation the Reclamation Department was created the same year, which is now redesignated as the Reclamation and Probation Department.

The Good Conduct Prisoners Probational Release Act has since been made applicable to the whole of West Pakistan.

The Act

This act makes provision for the probational release from prison of inmates with good antecedents and an untarnished prison record. Prisoners so released are called probationers, and are placed for the unexpired term of their sentence under the supervision and control of a probation officer from the Reclamation Department.

It will thus be seen that the Reclamation Department is not only striving to save the convicted persons socially, economically and morally, but is also indirectly helping their families from a life of unhappiness and degradation brought upon them by their erring members. It is remarkable to note that not a single probationer has relapsed into crime after being treated on probation by the department.

Environment plays a very important role in the development of character and personality of an offender. More stress is, therefore, laid on this aspect. To create normal conditions of life, so vital and essential for the development of a human being, the convicted persons are encouraged to maintain their family ties during the period of their probation.

Reformatory Farms

Since a majority of the prison population hails from the agricultural class, two agricultural farms, one for adults and the other for Borstal probationers, are maintained at Burewala by the Reclamation Department. The convicted persons are employed on the farms on *batai* system. The tenants get 60% of the total income, leaving the rest to the government. The farms not only help these unfortunate persons to keep themselves fully engaged, but also enable them to take away at the time of final release considerable amount of accumulated earnings. This is a great help in giving them a good start in their new life. Some of the probationers have saved Rs. 3,000 during their stay at the farms.

The exceptionally good work done by the reformatory farms has attracted attention from a number of foreign

experts on criminology. The Chief of Social Defence of UNO specially visited the farms. A number of others have described their useful working as a significant development in the system of open institutions in the world today.

Study of Crime Histories

The department has recently started for the first time in its history the case-work or the study and maintenance of history records of each and every individual offender under its charge, and the application of up-to-date probation methods in their treatment in the light of their past history, their present behaviour and their response to the advice and guidance of the probation officer. In fact, these methods form the basis and fundamental principles of the treatment of offenders under probation, and are the very foundations on which the whole system of probation is built.

Wider Probation Facilities

In order to bring about probation in a form suited to the needs of this country, the department has drafted and submitted to the government a draft ordinance namely, the Pakistan Probation of Offenders Ordinance. Its consideration is now in the final stage and a decision is shortly expected from the Government of Pakistan in the form of Presidential assent to its promulgation. Over 70% of the convictions comprise raw and chance offenders, sentenced to short terms of imprisonment. Out of the average number of 14,000 convicted persons in jails, more than 4,500 are expected to be placed on probation every year as soon as this ordinance is enforced.

This ordinance contemplates placing particularly this class of convicts on probation from the very first day of their conviction by the courts in consultation with the department, thus totally eliminating the so harmful prison influences and contamination with hardened criminals in jails. When enforced, this ordinance will revolutionise the criminal justice policy in this country, bringing it in this respect in line with other advanced countries of the world. It will also effect a saving of some five million rupees now spent on maintaining these criminals in jails. This huge amount can be utilised on more useful and constructive schemes to rehabilitate this maladjusted section of the people.

The department has, during the year under review, submitted to the government two drafts of proposed legislation to afford protection, care and guidance to children forced into a criminal life and to young persons who offend the law in some form or the other.

EXCISE AND TAXATION

Among other things, the Excise and Taxation Department is concerned with the manufacture, sale and distribution of salt which is an essential commodity of daily consumption. This is done on a no-profit-no-loss basis so that the price of salt has remained as low as 11½ annas per maund, notwithstanding a phenomenal rise in the prices of other commodities, and increase in the cost of mining machinery and its replacement.

The main sources of salt in the province are the rocks of Khewra, Warcha and Kalabagh, which are extremely rich in deposits. Large quantities of sea salt are also manufactured by private enterprise. The year under review showed a marked increase in the production of salt, the output rising to 3·57 million maunds. The quantity of salt distributed during the year comes to 2·65 million maunds. Special arrangements were made to step up the supply of denatured salt for industrial purposes, and the supply attained the record figure of nearly 230,000 maunds. There was free movement of salt, with the result that no area or region experienced any shortage during the year.

The other functions of the department are the assessment and collection of the Urban Immovable Property Tax, the Entertainments Tax, the Motor Vehicles Tax, the Race-Horse Betting Tax and the Tobacco Vend Fee.

Property Tax

To facilitate the collection of the Urban Immovable Property Tax throughout the province, the act was unified and enforced in various towns in the integrating units, such as Bahawalpur, Rahimyarkhan, Hyderabad, Sukkur, Shikarpur and Quetta.

The collection of property tax has received great impetus during the present regime, with the result that the revenue collected from this source during the year 1958-59 rose to Rs. 9,116,481 as against Rs. 6,545,594 in the preceding year. Similarly, the demand of property tax rose from Rs. 7,917,329 to Rs. 11,393,300. The demand is expected to go up still further on the completion of assessment operations in the various rating areas.

Entertainments Duty

In order to secure better results the Entertainments Duty Acts were consolidated after integration. Legislation was enforced on a province-wise basis and the tax was levied throughout West Pakistan at a uniform rate equal to 50 % of the admission fee of entertainment houses.

There are in all 170 entertainment houses in the province, and the revenue derived from this source during the year 1958-59 increased to Rs. 11 million from Rs. 9,270,000 in the preceding year. As many as 2,204 cases of evasion of tax were detected during the year as compared to 1,300 in the previous year.

Motor Vehicles Tax

Income from the Motor Vehicles Tax registered a marked increase during the year. As a result of the enforcement of a unified West Pakistan Motor Vehicles Tax Act 1958, the number of vehicles assessed to tax rose from 23,714 in 1957-58 to 27,046 in the year under report, showing an incidental increase in revenue from Rs. 11,470,000 to Rs. 16,300,000.

Similar measures fetched an income of Rs. 228,000 from the Tobacco Vend Fee during the year 1958-59.

Tax on Horse-Racing and Liquor

Yet another source of income is the West Pakistan Horse-Race Betting Tax Act 1958. Under this act the tax which was previously leviable on winnings only is now leviable on all bets. Revenue from this source rose to Rs. 545,000 in 1958-59 from Rs. 491,000 last year.

Despite partial prohibition in the province, the income from the vend fee on liquor went up from Rs. 5,440,530 in the year 1957-58 to Rs. 6,357,579 in the year 1958-59.

Spirits and Alcohol

The Excise and Taxation Department also controls the manufacture of chemicals and spirituous medicinal products. With a view to making the province self-sufficient in these chemicals, four new works were sanctioned during 1958-59, raising the number to 32. The output of commercial spirits considerably increased during the year. The question of extracting power alcohol from large quantities of molasses available as a by-product in sugar factories is also under the active consideration of the government. A draft of a new Power Alcohol Act has been prepared, and the decision with regard to the preparation of power alcohol on commercial scale will be shortly finalised.

Opium

The department discourages the use of opium and other intoxicants in conformity with the central government's commitment to the UNO. The government has, therefore, reduced the provincial quota of excise opium from 10,438 seers in 1953-54 to 8,798 seers in the year 1958-59. This decrease has not resulted in any reduction in the revenue from this source. On the other hand, due to open auction of opium vends from year to year, the income went up from Rs. 5,466,644 in the year 1957-58 to Rs. 5,966,040 in the year 1958-59. To save foreign exchange and make the country self-sufficient in opium, cultivation of poppy on a limited scale has been

undertaken in selected areas of the former Punjab and NWFP.

Opium smoking and possession, and consumption and sale of *charas* are totally prohibited in the province. To ensure compliance with the rules pertaining to this aspect of the problem, strict vigilance is kept on smugglers. As a result of these measures 3,492 cases were detected under the Excise, Opium and Opium Smoking Acts, leading to the recovery of about 25 maunds of *charas*, 18½ maunds of *bhang*, over 358 maunds of *lahan*, 434 gallons of liquor, 6 maunds of opium and substantial quantities of other contraband drugs like morphia, cocaine, pathidine, opium derivatives and poppy.

DIVISIONAL DEVELOPMENT BOARDS

Consequent upon the advent of the new regime and promulgation of martial law in the country, the non-official members having ties with political parties ceased functioning as members of the divisional development boards and the district and agency development committees. These boards and committees are now composed of regional heads of departments and the local subordinate officers of nation-building departments.

The main object of constituting the boards in the divisions and subordinate committees in the districts and agencies was to make possible the quick implementation of small schemes which can easily be undertaken on the spot instead of going through the routine of action by the departments concerned. The Government of West Pakistan has been allocating a substantial amount each year to finance schemes of local importance, particularly those relating to the rural areas. This amount which is non-lapsable is apart from the usual annual budget allocations made to the various departments for the development projects sponsored by them.

The administrative approval for execution of shemes is accorded by a development board only when they have been technically examined and are otherwise found feasible and helpful for the people of the area they concern.

A board is authorised to sanction expenditure within its yearly allocation up to Rs. 50,000 on each productive scheme and up to Rs. 25,000 on an unproductive scheme, provided the scheme is not part of a larger whole split up simply to bring it within these limits. Schemes in excess of these limits are required to be submitted to the government for approval by the Provincial Development Council.

Peshawar Division

For and up to the year 1958-59, the provincial government has allocated Rs. 1,050,000 for development schemes in the settled districts and Rs. 450,000 for those in the tribal areas.

On the recommendations of the district/agency development committees the Peshawar Divisional Development Board has sanctioned 130 schemes of local significance, the details of which are as under :—

	Rs.
Irrigation	616,616
Buildings and Roads	498,109
Animal Husbandry	58,160
Forests	26,400
Education	31,450
Health Services	60,500
Agriculture	6,810
Total	1,298,045

Out of the total amount, a sum of Rs. 616,616 has been spent on irrigation schemes because more attention is being paid to the development of soil, protection of irrigated areas from floods, digging of new channels and clearing of drains, in order to effect the greatest possible increase in foodgrain production. Another sizable amount of Rs. 498,109 was spent on the construction of links between agricultrally productive villages and main roads to allow easier flow of produce, the construction of spurs and bridges, the provision of drinking water supply in rural areas, and other works of community interest.

The rest of the amount covers the cost of schemes regarding the establishment of poultry units, increase in the wool yield, provision of livestock for upgrading the indigenous cattle, soil conservation, opening of adult education centres, family planning, T B clinics and purchase of agricultural implements.

Such schemes are expected to prove extremely beneficial in improving living conditions and the economy of the people they affect. Another utility is that they provide a channel for co-operation between the official agencies and the people and augur well for future development programmes in these areas.

To raise the standard of living of the people of the Kaghan Valley and to make the valley more attractive for tourists, the government also sanctioned a special allocation of Rs. one million for its development. A sum of Rs. 815,900 has so far been spent on 57 schemes, most of which relate to the construction of jeep roads, bridges and rest houses, the provision of added amenities to attract tourists to the picturesque valley and schemes to open up the side valleys to the main economic outlet to Balakot.

Rawalpindi Division

Cultivation in the Rawalpindi aud Jhelum districts and parts of the Gujrat district depends on rainfall. Means of communications in the division are poor and need improvement for connecting the far-flung areas with market towns and the main highways. Accent, has, therefore, been on improving the roads and the water-supply position, both for drinking and for irrigation.

The divisional development board approved 109 schemes during the year at an estimated cost of Rs. 1,623,974. Of this amount, Rs. 939,012 have been sanctioned out of the developnent fund while the balance will be met out of the U S A Wheat Fund, some financial contribution by the local bodies concerned, and free voluntary labour by the people.

A sum of Rs. 600,000 in the year 1956-57 and an equal amount during the year 1957-58 was allocated for the division. Rupees 300,000 were placed at the disposal of the board during the year 1958-59.

In the Gujrat district, five schemes relating to education, forests and animal husbandry at an estimated cost of Rs. 40,930 were financed out of the development fund.

Similarly, in the Shahpur district 34 schemes relating to water-supply, agriculture, protective bunds, forests, education, etc., were sanctioned at an estimated cost of Rs. 400,000, of which Rs. 211,820 were out of the development fund and Rs. 188,270 will be met by the public or the local bodies concerned.

In the Jhelum district, 33 such minor schemes were sanctioned at an estimated cost of Rs. 562,723. Of this, Rs. 304,976 will come from the development fund and the balance will be paid by the local bodies and through voluntary labour.

For the Rawalpindi district too, 37 schemes were approved at an estimated cost of Rs. 620,231. Of this, Rs. 381,286 were sanctioned out of the development fund.

On the recommendation of the Murree Hills High-Powered Commission, 19 schemes were considered by the divisional development board for implementation. These schemes are being tackled locally by various departments. Six schemes regarding construction of the Rawalpindi—Lehtrar road, propagation of walnut and mulberry plantations and sheep, poultry and cattle-breeding have been taken up by the board and financed from the development fund.

Forty more schemes involving electrification of hill villages, terracing of hill slopes, etc., are under way.

Since the formation of the Divisional Development Board, Rawalpindi, 194 schemes have been sanctioned. Some of these schemes have been completed and others are at various stages of implementation.

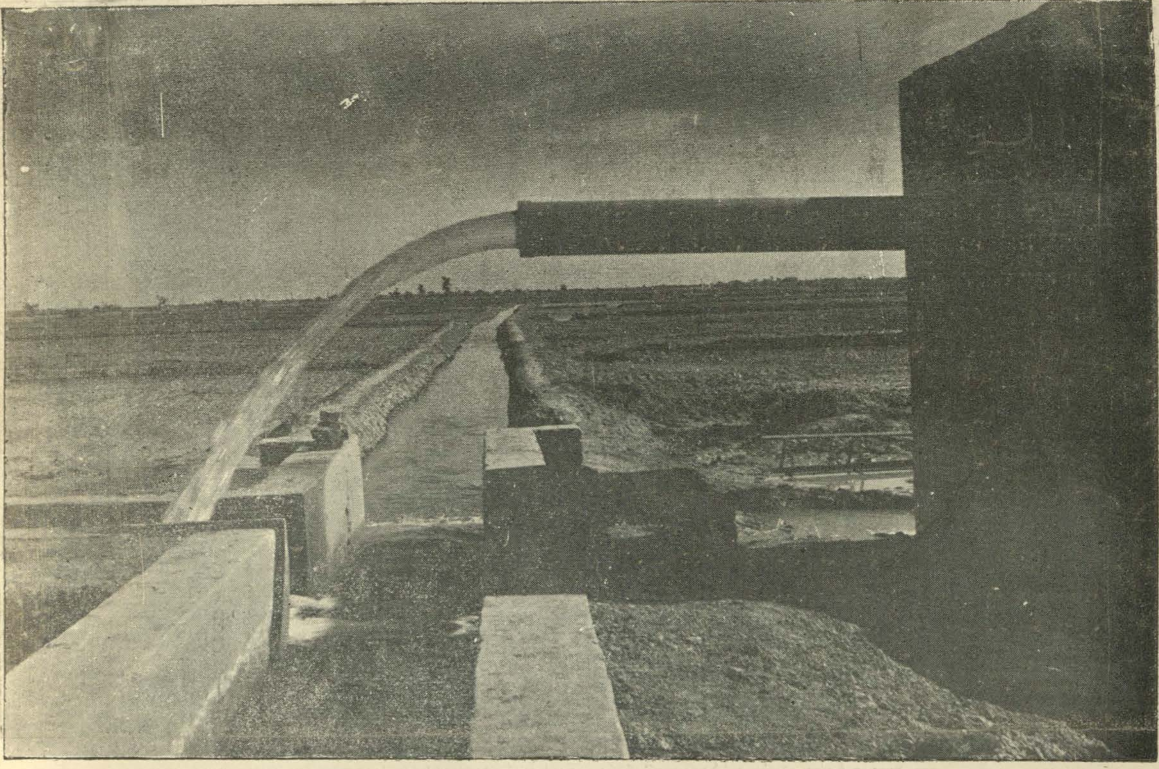
Dera Ismail Khan Division

This is an under-developed division where vast tracts of land are lying barren for want of irrigation facilities. Similarly, supply of drinking water is the crying need of the people of this area. The divisional development board is doing its best to help implement development schemes calculated to meet these two difficulties. These schemes usually take the form of new tube-wells and water-tanks for drinking water purposes, and the utilisation of the local small rivers for providing regulated irrigation.

Out of the development fund, a sum of Rs. 350,000 was allocated to this division during the year 1958-59. A further amount was also allocated to the 4 districts, 3 agencies and 3 special areas.

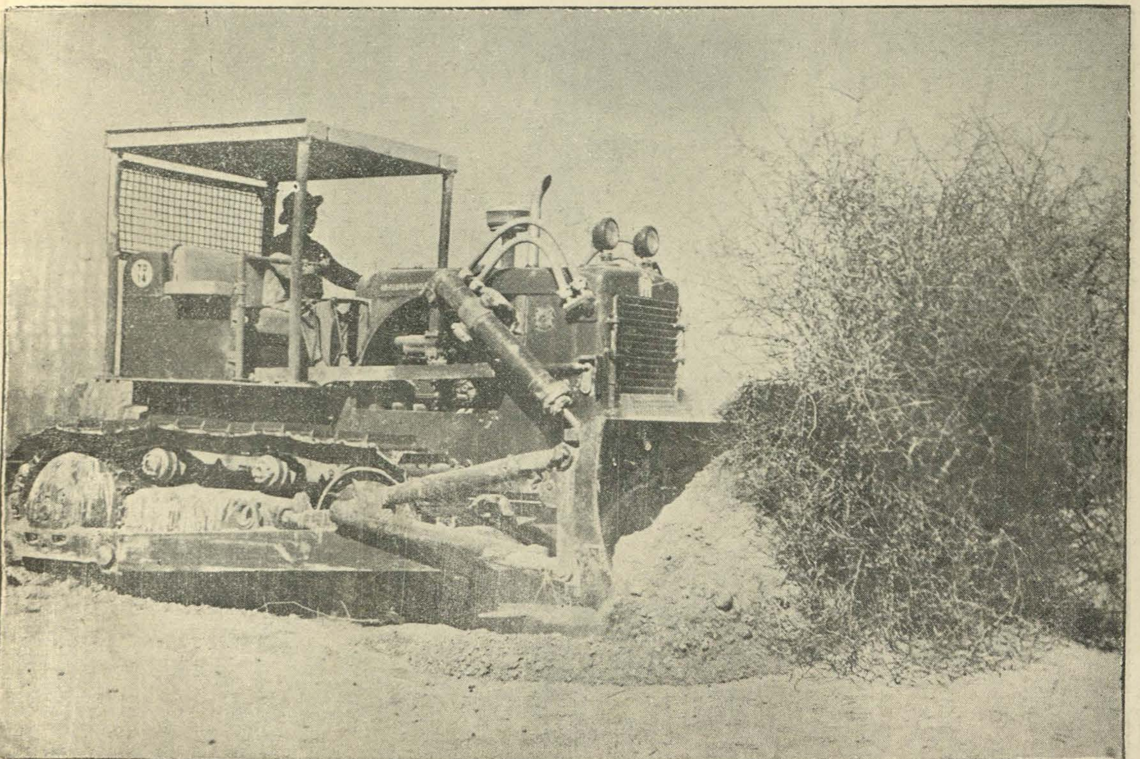
During the period under report, 42 productive and 28 non-productive schemes were sanctioned by the board at an estimated cost of Rs. 376,683 and Rs. 2,21,533, respectively. Twenty-three productive and 3 non-productive schemes have been completed during the past year at a total cost of Rs. 231,167 and 21,721 respectively, while work on the remaining is in progress.

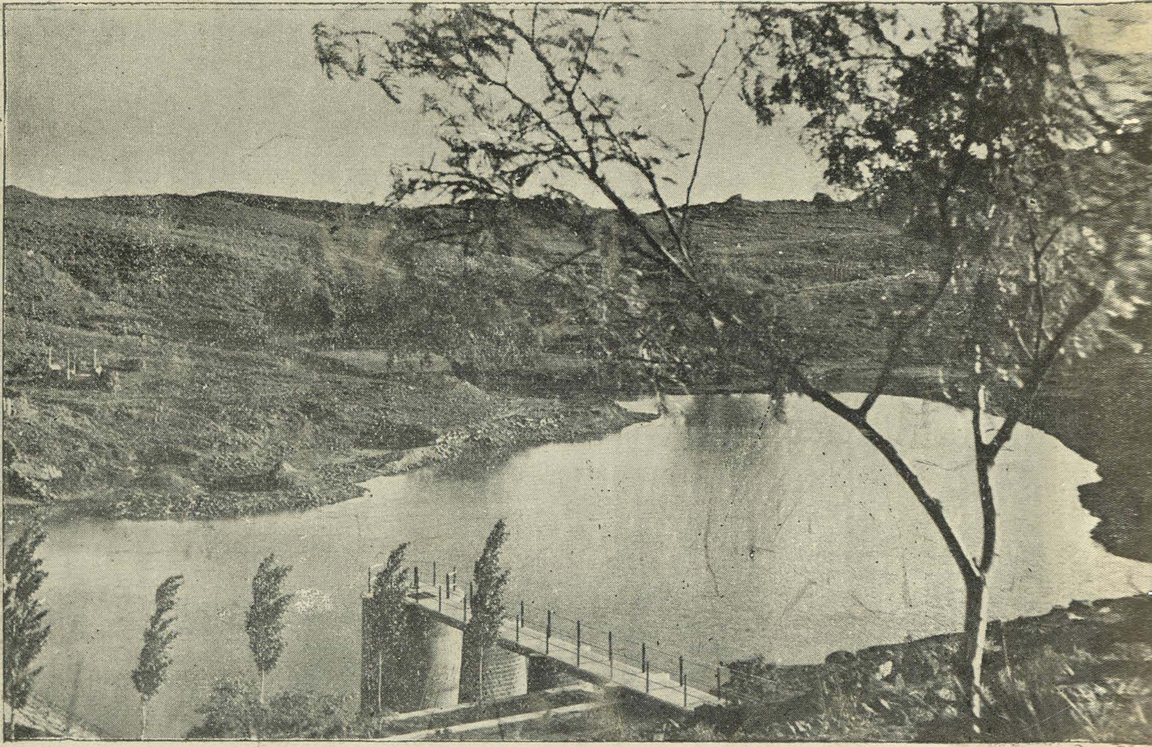
A sum of Rs. 16,535 and Rs. 671,000 was also allocated to the Mianwali and Dera Ismail Khan districts out of the U S A Wheat Gift Fund for implementation of schemes in the scarcity areas.



One of the many tube-wells installed in the Dera Ismail Khan division to promote irrigation

A bull-dozer attacks a thorny shrub in an arid area. Good work has been done by the development boards to implement small schemes of land reclamation.





Dames Lake at Fort Munro. This small hill-station is being popularised by the Divisional Development Board, Bahawalpur

Among other things, the development boards encourage handicrafts. These are some of the handloom products manufactured in villages



Sixty tube-wells at a cost of Rs. 3,707,386 were sanctioned by the government for the Dera Ismail Khan district. The scheme aims at irrigating 45,000 acres of very fertile land on the right bank of the Indus between Bilot and Gishkori, which was formerly barren and unproductive. Besides, it provides drinking water facilites to the population of the villages in this area. All the sixty tube-wells have been sunk, and 43 are already in operation and supplying irrigation facilities to a large tract of land.

The Gishkori channel which was formerly fed by lift irrigation from the Indus will now be fed by the tube-wells sunk for the purpose. The work of installation is in progress. The power transmission lines have been extended up to Gishkori. The remaining 17 tube-wells will be shortly fitted with other requisite machinery and will come into operation by the end of this year. The earth work at Gishkori is nearly complete and only finishing touches remain.

Frontier Regions

In order to make possible the implementation of minor development schemes in the tribal areas where the terrain does not permit much exploitation of water resources for irrigation purposes, the West Pakistan Government has recently constituted a separate development board under the chairmanship of the Commisioner and Resident-in-Frontier Regions. This board has started work and is already engaged in a number of schemes of great utility to the tribal people. Its jurisdiction extends over the agencies and the tribal areas attached to some of the settled districts.

Bahawalpur Division

This division includes such under-developed parts as the excluded area of Dera Ghazi Khan district and the Cholistan Area extending over the three districts of the former Bahawalpur state.

The government has so far allocated a sum of Rs.1,500,000 to the Bahawalpur Divisional Development Board, against which 170 schemes worth Rs. 1,364,752 have been approved by the board. Out of the total amount sanctioned, a sum of Rs. 150,000 has been earmarked for schemes relating to the excluded area of Dera Ghazi Khan.

During the year under report, 120 schemes worth Rs. 937,761 relating to education, agriculture, veterinary, forest, health services, irrigation, industries and other departments were approved by the board.

Schemes worth Rs. 179,950 sanctioned by the board include circulating libraries, library books and science equipment for various schools and colleges, opening of adult education centres, installation of water pumps in schools and opening of a museum in the Central Library, Bahawalpur.

Similarly, schemes sanctioned in the field of agriculture at a cost of Rs. 154,000

were for the provision of improved implements, orchard development, for the cultivation of land and development of government gardens and fruit nurseries in the Muzaffargarh and Dera Ghazi Khan districts.

A sum of Rs. 98,000 was sanctioned for the improvement of the Hissar cattle breed in Sadiqabad tehsil, livestock in the Bahawalpur and Bahawalnagar districts, Baluchi horses in the Muzaffargarh district and the Dajal cattle breed in the Dera Ghazi Khan district. It also includes establishment of poultry farms at various places, destruction of wild pigs and improvement of the Bahawalpur Zoo.

The work on the construction of *diggis*, wells, tanks for drinking water, and bunds entailed a sum of Rs. 95,685. Schemes worth Rs. 140,318 were sanctioned by the board for the construction of culverts, sinking of wells in Dhundi estate, Rajanpur and on the Fordwah Branch Canal, construction of a bund near Leiah town and for canal water supply to the Cholistan area.

Industries received a sum of Rs. 85,697. The schemes are for opening lacquer-turning and weaving sections in the Dera Ghazi Khan Industrial School, revival of the ivory and *khes* industries in Muzaffargarh district, establishment of industrial homes at Rahimyar Khan, Bahawalnagar and Leiah, industrial exhibition at Bahawalpur and opening of the Arts and Crafts School at Bahawalpur.

Khairpur Division

There have been considerable developments in various fields of life of this division since the advent of the new regime. Nearly two dozen schemes at an estimated cost of Rs. 268,538 were sanctioned by the Divisional Development Board, Khairpur, during the year under review.

These include the provision of anti-malaria drugs in villages, opening of 7 touring veterinary dispensaries, creation of 5 sports associations and a divisional sports association, tube-well drilling, construction of the new Sial Minor Canal, a drainage scheme for the Khairtown, etc.

Quetta Division

The Quetta Divisional Development Board started allocating funds for schemes sanctioned by it in April 1958 with a sum of Rs. 1,200,000 at its disposal. This allocation was further supplemented during 1958-59 by another grant of Rs. 300,000. During this period the board sanctioned 163 schemes costing Rs. 1,563,113 pertaining to various departments.

There is an acute shortage of water both for drinking and irrigation purposes in this part of the country. Greater importance was, therefore, given to the development of water resources and the protection of agricultural lands from erosion by floods. In order to achieve this end, a major portion of the development fund amounting to Rs. 922,793 was sanctioned by

the board for the execution of 97 schemes which mainly related to the cleaning, excavation and extension of *karezes* (underground water courses), lining of channels and construction of flood-protection bunds. On the completion of these schemes an additional area of about 8,000 acres will be brought under the plough, besides providing much-needed drinking water to the people.

Similarly, a sum of Rs. 101,500 was sanctioned for the execution of agricultural schemes involving the levelling of land by means of tractors. The completion of these schemes will bring an additional area of about 2,000 acres under cultivation.

In order to provide better medical facilities to the people, the development board sanctioned 14 schemes costing Rs. 1,42,700. The provision of drinking water facilities at village level was arranged in various parts of this division by sanctioning funds to the tune of Rs. 137,820 for 22 schemes for the construction of *pacca* and *kacha* tanks.

Nine schemes costing Rs. 8,68,000 were sanctioned to provide additional accommodation in nine schools and for the purchase of scientific equipment. A sum of Rs. 47,000 was sanctioned for the execution of five schemes for the extension of poultry farms, artificial insemination of buffaloes and the establishment of an animal husbandry unit in the Bugti tribal area.

For the proper exploitation of forest produce the construction of two forest roads was sanctioned at a cost of Rs. 50,000. In addition, Rs. 8,500 were sanctioned for afforestation in selected areas of the Zhob district.

Rupees 10,000 were given for opening a centre to train people in Harnai in utilising *mazri*, a local fibre. Besides, eight schemes costing Rs. 56,000 and providing recreational and social amenities were sanctioned by the board.

Hyderabad Division

Nearly Rs. 500,000 have been sanctioned by the Divisional Development Board, Hyderabad, for the implementation of more than 30 schemes relating to various departments. Some of these schemes, which entail heavy expenditure, are the construction of wells in 52 villages of the Dadu district, establishment of district nurseries at selected places, opening of 12 libraries and sinking of 12 wells in the Tharparkar district.

One of the schemes recommended by the board for sanction by the Provincial Development Council is for repairs to and renovation of the Laki hot springs in the Dadu district at a cost of Rs. 25,000. These springs are said to be useful for skin diseases, and every year thousands of people visit them for treatment.

Another scheme for growing vegetables and a green belt around the Hyderabad city at a cost of Rs. 233,900

was also recommended. It has been planned to convert the present Wadhu Wah into a perennial canal by pumping water into it. This scheme, when completed, will provide a green belt around Hyderabad from north to west and from west to south, in addition to making fruit and vegetables available for the town in abundance.

Out of the 60 schemes sanctioned by the board, 22 have already been completed, 28 are under implementation, while 10 have been sent up for administrative approval.

Multan Division

A total of 45 schemes costing a sum of Rs. 3,21,649 were sanctioned by the Divisional Development Board, Multan, during the year under report. All these schemes are calculated to provide immediate relief to the people of the under-developed rural areas. In the Lyallpur district, the construction of tanks has been proposed in villages where pure drinking water is not available due to water-logging and salinity. Provision of *pucca* drains in 26 villages will improve their sanitary conditions. There is also a scheme for the improvement of village roads by constructing culverts in large numbers.

Schemes to straighten the Ravi by making a 400 feet long cut to replace a 6-mile loop near *Khan-da-Tibba* at a cost of Rs. 327,000 and the construction of half a mile long bund to guard against inundation at a cost of Rs. 5,000 are being implemented immediately.

Lahore Division

The Lahore Divisional Development Board has so far received a total allocation of Rs. 650,000. Out of this, schemes to the extent of Rs. 261,737 were approved by the board up to the end of 1958.

With the advent of the new regime, various other development schemes costing Rs. 92,409 were sanctioned by the board. These include elementary agricultural education at Balakwal and Abdullahpur and disposal of sullage water from the Sheikhupura city at a cost of Rs. 10,000 each. Schemes regarding metalling of road leading to the Hiran Minar at a cost of Rs.25,000 and construction of male and female wards in the Civil Hospital, Sharakpur, at a cost of Rs. 10,000 were also sanctioned. A scheme for the development of a poultry centre in Sialkot district involving Rs. 15,000 and schemes for putting up an audio-visual centre each at Sialkot and Daska at a cost of Rs. 10,000 were also approved.

In the Lahore district, various development schemes were dealt with during the year under report. The extension of the district board schools at Gandasinghwala and Lulliani has already been sanctioned at an estimated cost of Rs. 20,000. Construction work has since been started.

A bridge is being constructed over the Sattokatla drain at a cost of Rs. 6,632 of which Rs. 1,132 will be

contributed by the local people in the form of free labour. Another useful scheme sanctioned is for the construction of a 3,000 feet long *pacca* road connecting Chung with the Lahore-Multan road. This will cost Rs. 25,000 and is being taken up shortly.

The Rohi *Nullah*, which passes through Kasur town, had been causing devastation to private and government property worth millions of rupees every year during the monsoon. The project for its diversion into the Sutlej river was estimated by the Irrigation Department to cost about Rs. 2·7 million. Through the efforts of the board the *nullah* was diverted into the river through voluntary labour. The work created unprecedented enthusiasm and is a landmark in the annals of self-help. The work was only recently completed. The government bore only the cost involved in purchasing implements, feeding the voluntary workers and acquisition of land.

A tube-well co-operative society has been formed at Mughal Sarai, Chunian Tehsil, to increase agricultural produce. This is an important and useful step in the grow-more-food campaign. The board has sanctioned Rs. 5,000 for this purpose, and if the scheme proves successful similar societies will be formed elsewhere.

Thirteen schemes entailing an expenditure of Rs. 177,359 relating to the Sheikhupura district were sanctioned during the period under review. In addition, clearance of a number of drains was taken up in March this year on a purely self-help basis.

Sixteen more schemes costing Rs. 126,800 were recently approved by the board. A scheme for the construction of a bridge over the Deg *Nullah* on the Pasrur-Narowal road at a cost Rs. 440,000 was approved and recommended to the government for allotment of funds. Schemes for development of *kacha* roads from Rahwali to Mitranwali, Khajurwali to Toti Chak, Rahwali to Nandipur and Akalgarh to Ahmad Nagar in the Gujranwala district were sanctioned.

Other recently sanctioned schemes include opening of maternity and child welfare centres at Muridke and Mandi Chuharkana at Rs. 15,000, construction of a new building for the existing girls high school, Sangla Hill, at Rs. 12,500, additions to the M. B. High School, Kamoke, and provision of funds for the school building at Aodhra in the Gujranwala district at Rs. 10,000 each and a scheme to construct a metalled road in Lajpat Nagar in the Shahdara town at Rs. 9,000.

Kalat Division

Kanraj is a cut off hilly place in the Las Bela district. To connect this under-developed area with the district headquarters, the Divisional Development Board, Kalat, has sanctioned a sum of Rs. 25,000 for constructing a 90-mile long track. Some 70 miles of the

track have been completed. This will link Kanraj with a jeepable road, and timber and other produce of the area will be easily marketed in Karachi.

The board sanctioned a sum of Rs. 10,000 for the construction of a water-supply tank at Liari, which on completion will supply pure water to the local inhabitants who cannot get water from wells.

In Kalat a middle school for boys and a high school for girls have been opened, besides a number of primary schools for boys and girls. Five adult education centres, one of which is for women, have also been opened. Sericulture has been introduced in the district, and the value of silk cocoon produced during the last two years was Rs. 8,000.

Mastung has been linked with the Quetta-Dalbandin road through a strip of metalled road. Villagers have been prompted to construct 24 link roads. Besides, a 20-mile long road, 180 culverts and five bridges have been built by the villagers under the guidance of the Village-AID organisation.

In the Kharan district, a scheme known as Buddo River Irrigation Scheme has been approved by the government, and construction started which is expected to be completed shortly.

In the field of education, about 15 primary schools have been opened so far. The primary school at Kharan was upgraded to middle standard and thereafter to a high school. The construction of a boarding house at Kharan has since been completed out of the divisional development fund.

There was no hospital in any part of this district. The dispensary which existed at Kharan has now been provided with a qualified doctor. Three more dispensaries are likely to be opened during 1959-60 at the sub-tehsil headquarters at Rakhshan, Washuk and Mashkal where no medical facilities are available these days.

TOURISM

Tourism received its due share of recognition when the scheme for its promotion was incorporated in the Second Five-Year Plan of the country. The project, involving a total expenditure of Rs. 61,935,000 for the development of tourism in West Pakistan, aims at providing minimum essential requirements of accommodation, transportation and recreation by exploiting all available resources and encouraging private investment in trade where the returns are immediate. A number of commercial concerns and enterprising businessmen have expressed their willingness to contribute the major share of Rs. 57,180,000 which is likely to be needed for the construction of various types of hotel accommodation for tourists of both high and middle income groups. The government's contribution will be in the form of foreign exchange worth Rs. 23,090,000 which will be spent on the import of necessary equipment for hotels.

Hotels

The need for providing hotel accommodation at important tourist attractions is the major item covered by the scheme. It is proposed to construct a 200-room hotel at Lahore, a 100-room hotel at Peshawar and a 50-room hotel at Murree. Similarly, small hotels of 25 rooms each will be constructed at Kaghan, Nathiagali, Quetta, Kalam (Swat state) and Hyderabad. Provision of 10 log cabins has also been made for the Kaghan Valley. In addition, the existing hotels like the Faletti's at Lahore, the Flashman's at Rawalpindi, the Dean's at Peshawar, the Pines at Nathiagali, the Palace at Abbottabad and the Swat Hotel at Saidu Sharif will be renovated and expanded. The Warsak Dam lake near Peshawar and the Kalri lake in the Hyderabad division are being improved as tourist attractions, and will be provided with hotels, open-air restaurants, house-boats and *shikaras*.

Rest Houses

With a view to meeting the fast increasing demand of accommodation for tourists in out-of-the-way places, it has been decided to construct a number of rest houses and model inns at resorts like Moenjo-daro, Landikotal, Tangrot, Harappa, Chitral, Kafiristan, Skardu and Gilgit. To help overcome the present accommodation problem, it has been recommended that the existing inspection and *dak* bungalows in the vicinity of tourist spots should be thrown open to the public.

Roads

In order to link tourist resorts with the adjacent big towns, it is proposed

to improve and construct a number of approach roads like the Kotri-Larkana-Dokri Road, the 51-mile Kawai-Batakundi Road in the Kaghan Valley and a jeepable road from Naran to Saif-ul-Maluk, also in the valley. The roads between Murree and Abbottabad and between Mangla Dam and Tangrot will also be improved.

Transport

Modern buses, jeeps and taxis are to be provided under the scheme with a view to easing the transport situation to various tourist resorts. Ten self-driven taxis each for Peshawar and Lahore, two for Rawalpindi and one for Saidu Sharif (Swat) will be introduced, and 10 jeeps provided for the Kaghan Valley. Similarly, two station wagons will be provided for the Peshwar-Parachinar route, and six micro-buses for operation between Peshawar city and the tourist and archæological sites around it. The taxi service at Abbotabad will also be improved.

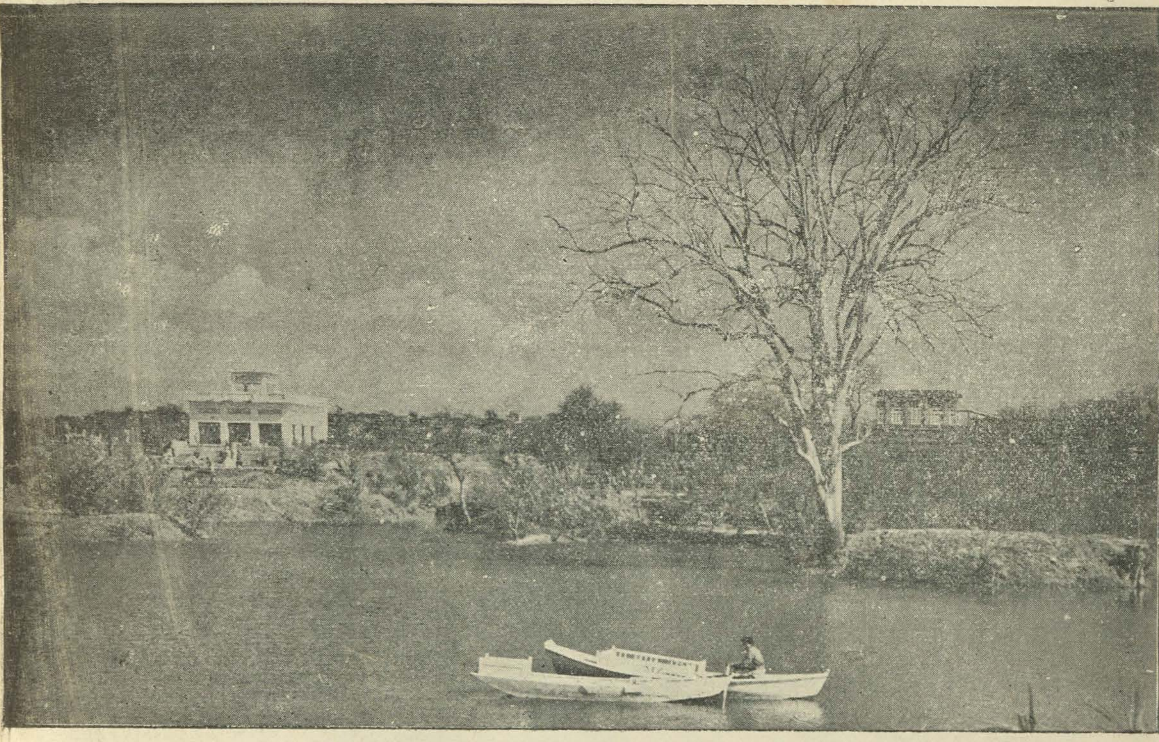
To shorten the travelling hours for visiting Swat and Moenjo-daro the scheme envisages the construction of air-strips at Saidu Sharif and at Moenjo-daro.

Kalri Lake

A Rs. 20 million scheme for development of the Kalri lake as a big tourist resort during the next five years has been adopted by the Kalri Development Board. To begin with, Rs. 4,500,000 will be spent this year on the establishment of a 40-acre nursery, two parks of 40 acres each, camping sites, and on the provision of different kinds of animals, birds and fish. Rupees 578,000 are proposed to be spent on afforesting the area surrounding the lake. Fifty miles of direct link roads and 10 miles of other good roads around the lake area are also planned to be laid. Also contemplated are a number of small bridges, 10 cottages, 2 rest-houses, 4 motor-boats, 10 yachts and 10 rowing boats. A diesel-electric station is shortly going to be installed in order to provide electricity to the whole area. The beauty of the lake's surrounding will be further enhanced by growing a number of orchards.

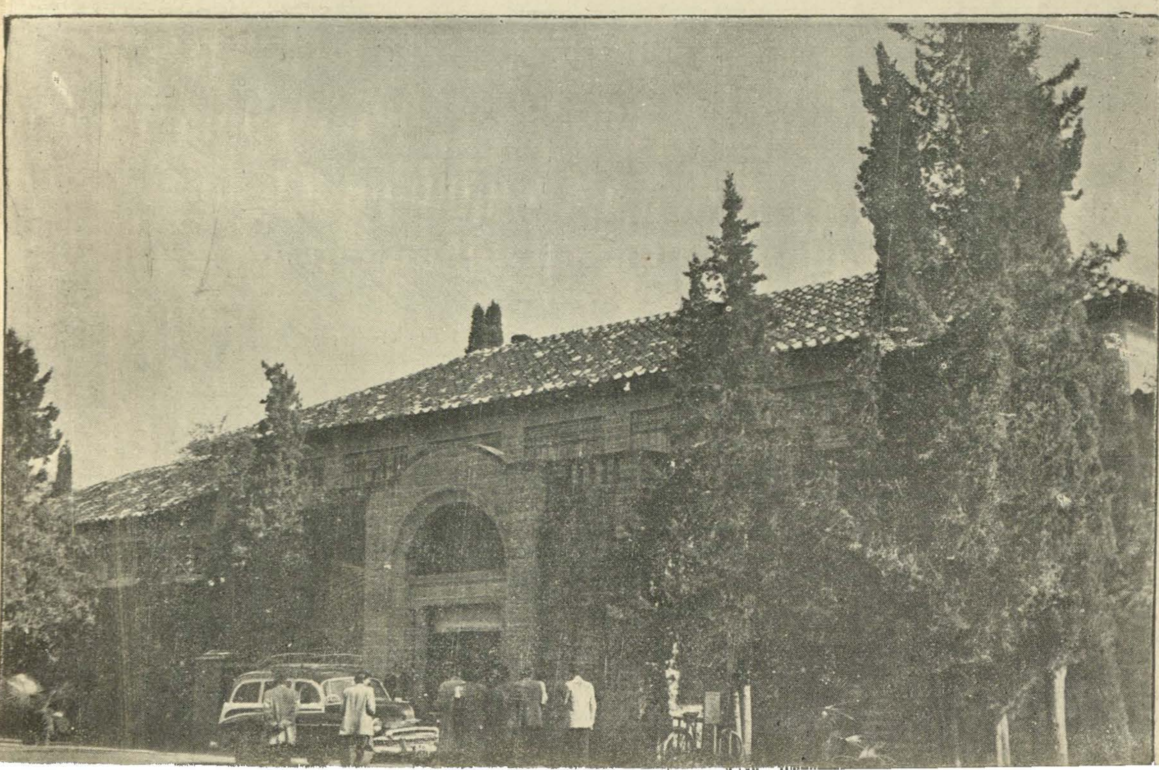
In order to inform and guide the foreign visitors, the Tourist Section of the Public Relations Department has brought out a number of publications which include guide maps of Lahore, Peshawar and West Pakistan; folders and brochures on Swat, Kaghan, Peshawar, the Khyber Pass, Lahore, Taxila, Moenjo-daro, Harappa and Hiran Minar; and a currency card and a conversation guide. A tourist information desk has been opened at the Faletti's Hotel, Lahore, and tourist display windows have been set up at the Wagah customs post on the border with India and at Lahore's Walton airport.

The Pakistan International Airlines Corporation has recently introduced



The Ayub National Park serves as a rest and recreation resort for the people of Rawalpindi

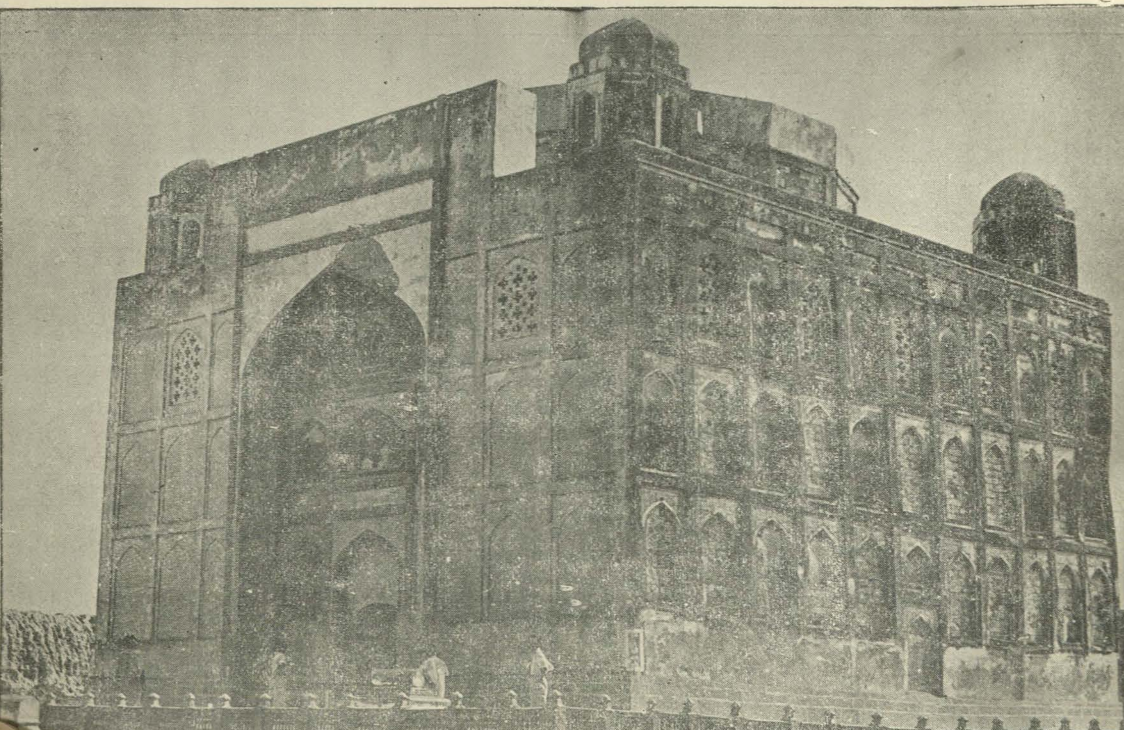
The Taxila museum houses the relics and antiquities discovered in the ruins nearby





Shogran in the Kaghan Valley. The valley is one of the most popular tourist attractions in Pakistan

The tomb of Ghulam Shah Kalhoro near Hyderabad





The Rewat fort on the Grand Trunk Road, eleven miles south of Rawalpindi. This ruined citadel is a monument of wild grandeur

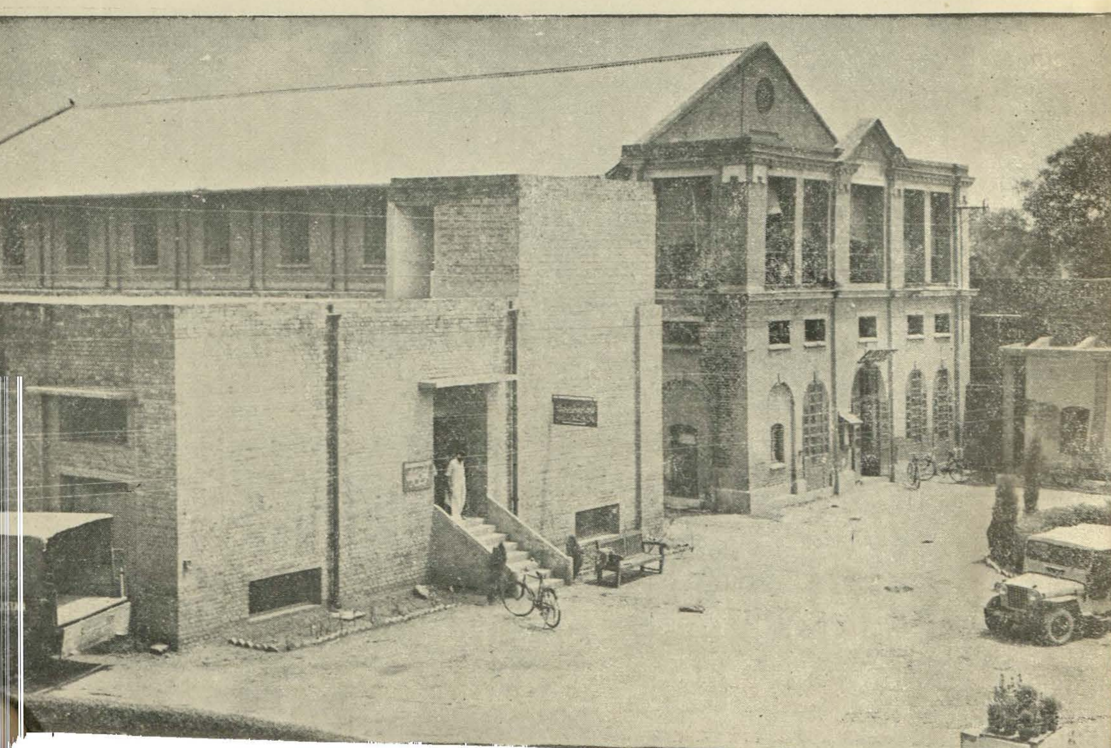
Choha Saidan Shah in the salt range hills provides some lovely scenery. It is proposed to develop one such place in these hills as a summer resort





The Government Press at Lahore. This is one of the most modern and best-equipped presses in the country

The Sale Depot (left) at Lahore where school text-books printed at government presses are sold. The Government Book Depot is in the middle background



all-inclusive 2 to 8 days tours to well-known tourist resorts. Permits are no longer necessary to visit Swat, and the restrictions on taking photographs in the Khyber Pass have been removed.

Kaghan Valley

For the over-all development of the Kaghan Valley the Government has constituted a committee and allocated a special fund of Rs. one million for the purpose. The committee, which functions under the Commissioner, Peshawar Division, has sanctioned a number of schemes which include the construction of jeep roads linking various beauty spots in the valley, building new rest houses equipped with modern sanitary fittings, and renovation of the existing ones. Rupees 34,500 for the construction of a new four-bed rest house at Naran and Rs. 44,220 for the renovation of rest houses at Naran and Balakot have been sanctioned. The committee has also purchased tents to provide additional accommodation for tourists.

The most significant development, however, is the opening of a new bridge over the Kunhar River at Balakot, which has provided means for vehicular traffic of all kinds to enter the valley. Tourists will now be able to go by car and bus and transport their goods in trucks instead of by mules and jeeps up to Paras, 18 miles inside the valley. The road ahead of Paras is also being widened and renovated to permit heavy vehicular traffic.

PRINTING AND STATIONERY

The Department of Government Printing and Stationery meets the requirements of all provincial government offices in respect of printed forms, paper, binding materials, drawing and stationery stores. The department, which has its network spread all over the province, also undertakes the printing and publication of the weekly Government of West Pakistan Gazette, Pakistan Law Reports, all kinds of publications released by the various government departments, books, pamphlets and brochures, folders, charts, calendars and diaries, text books for primary and middle classes and a number of other jobs. This it does through its printing presses in Lahore, Karachi, Peshawar, Bahawalpur, Khairpur, Mastung and Quetta. Besides, the entire range of tickets used by the government transport services is printed at the presses run and controlled by this department. Procurement and supply of typewriters to all government departments is also arranged by the department through the agency of the central government's Directorate of Supply.

Another duty of the department is the sale of government books and publications which is done through Government Books Deports at Lahore, Karachi, Peshawar, Bahawalpur and Khairpur. All priced publications are stocked by these depots and are sold on behalf of the concerned departments.

Shortage of foreign exchange has of recent times hindered the position of imports to the tune of Rs. two million annually which this department undertook in respect of paper-binding materials and stationery stores. An endeavour was made during the year under report to meet the situation by imposing a 15 % cut on all the indents received from various quarters. A 5% general cut was also levied on monetary allotments of all departments for the purchase of stationery stores. Indenting officers are asked to observe maximum economy in the use of articles of stationery and to eliminate wastage as far as possible.

Controller's Office

The Printing and Stationery Department functions as an attached department under a Controller and looks after all regional presses and stationery offices in the province. It also conducts standardisation of all old series of forms on one pattern and their printing at one press to avoid duplication. Printing work is also distributed by this office to subordinate government presses, as also to the various private presses in case of emergencies.

The Controller also holds the additional charge of the post of Superintendent, Government Press, Lahore. He pays occasional visits to regional government presses in order to check their work and increase their efficiency.

Stationery Office

The Provincial Stationery Office supplied about 800 items of stationery articles and paper to government offices and local bodies during the year. Bulk supplies were also made to the regional presses and stationery offices to enable them to meet the demand of regional indenting officers. Stationery articles manufactured in Pakistan were purchased through the West Pakistan Stores Purchase Officer. On account of heavy rush of demands, the storage capacity with the office is being increased.

Printing Presses

The department now controls eight printing presses in various parts of the province. They are: the Lahore Secretariat Press; the Central Jail Press, Lahore; the Borstal Jail Press, Lahore; and the government presses at Karachi Peshawar, Bahawalpur, Khairpur, Quetta and Mastung. The Central Jail Press at Peshawar was taken over by the department on 1st July 1959, and is being reorganised on the pattern of the Central Jail Press at Lahore.

The two jail presses at Lahore and the one at Peshawar normally train young convicts in the art of printing, so that after release they may adopt an honest profession to earn their livelihood. Some details of these various government presses are given in the following pages.

Lahore

The Lahore Secretariat Press is the biggest press in West Pakistan having about 1,000 technical and other staff on its rolls. It is equipped with the most modern and up-to-date letter-press, offset and rotary machines, lino-type, monotype, stereo, nickle-facing plant and roller casting equipment. A binding section is attached to this press with the latest machinery for binding, stitching, ruling, cutting, folding, die stamping and gold blocking work. The photo lithographic and process sections have been provided with three cameras, two vacuum printing down frames, whirlers, graining machine, arc lamps and other necessary equipment. Two dark rooms exist for wet and dry plates, besides a separate artist's room, retouching desks for line and half-tone, etchers, etc. Three machines were imported from Germany during the year for high speed and colour printing.

A well-equipped workshop has been added to the press to carry out machinery repairs and to manufacture small spare parts. The Secretariat Press was established in 1878, but this workshop was added only in 1946. Additional equipment was purchased for this workshop in 1958, and more staff was recruited to run it efficiently. The press has 511 machines at present as against 182 in 1946.

Karachi

Established in 1847, the Government Press, Karachi, now has a staff of 527 as against 200 in 1947. The number of indenting officers has also risen to 900 from 300. This press too is equipped with modern machinery and a fine new rotary machine has been added. This press is known for its quality printing and binding work. The staff of this press has made a name for itself in the field of sports and games, and its fine football team has won laurels in many tournaments in the country.

Peshawar

The Government Press, Peshawar, has its jurisdiction over the Peshawar and Dera Ismail Khan divisions and caters for the needs of about 500 indenting officers. Its responsibilities have almost doubled since integration, as formerly it was not looking after the needs of offices in the Campbellpur and Mianwali districts and the Frontier Regions.

Bahawalpur

The Government Press at Bahawalpur was established as an Urdu Press in 1865 to print vernacular forms for the state government. Later it was expanded to do English work too, and since integration its working has very much improved.

Khairpur

The Government Press, Khairpur, was established in 1914 but was modernised only in 1950. It has now been equipped with the latest machines and has a type and composing foundry of its own. It can undertake mechanical composing of Urdu and Sindhi as well as English. There are seven printing machines in this press, out of which four are automatic.

APPENDICES

GOVERNOR

MR. AKHTER HUSAIN

WEST PAKISTAN HIGH COURT

LAHORE BENCH

1. Mr. Justice M. R. Kayani (Chief Justice)
2. Mr. Justice Shabir Ahmad
3. Mr. Justice B. Z. Kaikaus
4. Mr. Justice Abdul Aziz Khan
5. Mr. Justice J. Ortcheson
6. Mr. Justice Muhammad Yaqub Ali
7. Mr. Justice A. R. Changez
8. Mr. Justice Masud Ahmad
9. Mr. Justice S. A. Mahmud

ADDITIONAL JUDGES

1. Mr. Justice Bashir Ahmad
2. Mr. Justice Sajjad Ahmad

KARACHI BENCH

1. Sir George Constantine
2. Mr. Justice Inamullah Khan
3. Mr. Justice Rahim Bakhsh Munshi
4. Mr. Justice Waheed-ud-Din Ahmad
5. Mr. Justice Qadeer-ud-Din Ahmad
6. Mr. Justice Ilahi Bakhsh Khamisani

ADDITIONAL JUDGES

1. Mr. Justice Abdus Salam Farooqi
2. Mr. Justice M. B. Ahmad

PESHAWAR BENCH

1. Mr. Justice Muhammad Shafi
2. Mr. Justice Abdul Hamid Khan
3. Mr. Justice Habibullah Khan

SECRETARIES AND MEMBERS, BOARD OF REVENUE

1.	Mr. M. Khurshid	Chief Secretary.
2.	Mr. A. H. Quraishi	Additional Chief Secretary.
3.	Mr. S. I. Haq	Development Commissioner and Secretary, Planning and Development.
4.	Mr. Mahdi Hassan	Secretary, Food.
5.	Mr. M. M. Ahmed	Secretary, Finance (I).
6.	Mr. A. G. N. Kazi	Secretary, Finance (II).
7.	Mr. Inayatullah	Secretary, Irrigation Communications and Works.
8.	Mr. Khuda Bakhsh Bucha	Secretary, Revenue and Rehabilitation.
9.	Mr. S. Alamgir	Secretary, Home. Secretary, Information.
10.	Mr. Muhammad Masuood	Secretary, Medical and Local Government.
11.	Mr. Hassan Habib	Secretary, Education.
12.	Mr. K. Shahzaman Khan	Secretary, Industries and Commerce.
13.	Mr. A. K. Malik	Secretary, Anti-Corruption.
14.	Mr. M. W. Abbasi	Member, Board of Revenue (Colonies).
15.	Mr. M. Z. Khan	Member, Board of Revenue (Revenue).
16.	Mr. I. U. Khan	Member, Board of Revenue (Land Utilization).
17.	Mr. S. M. Ikram	Member, Board of Revenue (Settlements)

HEADS OF DEPARTMENTS

1.	Advocate-General	Syed Jamil Hussain Rizvi.
2.	Director of Agriculture	Mr. A. M. Shaikh.
3.	Director of Animal Husbandry	Mr. S. M. Sarwar.
4.	Chief Engineer, Buildings and Roads	Mr. Inamullah Khan.
5.	Director of Civil Defence	Mr. A. I. S. Dara.
6.	Registrar, Co-operative Societies	Mr. M. H. Shah.
7.	Director of Public Instruction	Prof. Siraj-ud-Din.
9.	Director of Excise and Taxation	Mr. Muhammad Afzal.
10.	Director of Food	Mian Muhammad Shafi.
11.	Chief Conservator of Forests	Mian Tasdique Hussain.
12.	Game Warden	Sardar Abdul Samad.
13.	Director of Health Services	Lieut-Colonel B. H. Syed.
14.	Director of Industries and Mines	Mr. Amanullah Khan Niazi.
15.	Chief Engineer, Irrigation	Mr. S. I. Mahbub.
16.	Inspector-General of Prisons	Sh. Ikram Ali.
17.	Director of Labour Welfare	Mr. A. M. K. Mazari.
18.	Chief Auditor, Local Funds	*Vacant.*
19.	Inspector-General of Police	Mr. Shariff Khan.
20.	Director of Public Relations	Mr. Mahmud Nizami.
21.	Chairman, West Pakistan Public Service Commission	Lieut-General. Nasir Ali Khan.
22.	Director of Reclamation and Probation	Mr. Hamid-uz-Zaffar.
23.	Controller of Printing and Stationery	Mr. I. H. Siddiqui.
24.	Administrator, Village AID	Mr. Masih-uz-Zaman.
25.	Director-General of Anti-Corruption	Mr. A. K. Malik.
26.	Solicitor	*Vacant.*
27.	Registrar, High Court of West Pakistan	Khan Bashiruddin Ahmad.
28.	Director, Technical Education	Dr. Akmal Hussain.
29.	Director, Bureau of Education.	Dr. Abdur Rauf.
30.	Director-General, West Pakistan Rangers	Brig. Said-ud-Din Khan.
31.	Chairman, Thal Development Authority.	Mr. R. D. Howe.
32.	Chairman, Water and Power Development Authority	Mr. Ghulam Faruque.

COMMISSIONERS, DEPUTY COMMISSIONERS AND POLITICAL AGENTS

Peshawar Division

Commissioner	Agha Abdul Hameed.
Deputy Commissioner, Peshawar	Mr. Roedad Khan.
Deputy Commissioner, Mardan	Mr. Zafar Ali Khan.
Deputy Commissioner, Hazara	Syed Munir Hussain.
Deputy Commissioner, Campbellpur	Mr. Ijlal Hussain.
Political Agent, Malakand	Mr. Muhammad Ayub Khan.
Political Agent, Mohmand	Mr. S. M. Ayub.
Political Agent, Khyber	Mr. Sadullah Khan.
Additional Political Agent, Chitral	Syed Imran Shah.

Dera Ismail Khan Division

Additional Commissioner	Mr. Hidayatullah Khan.
Deputy Commissioner, Dera Ismail Khan	Mr. Fakhr-uz-Zaman Khan.
Deputy Commissioner, Bannu	Arbab Noor Muhammad Khan.
Deputy Commissioner, Kohat	Syed Faridullah Shah.
Deputy Commissioner, Mianwali	Mr. Ghulam Farid Khan.
Political Agent, Kurram	Arbab Muhammad Farid Khan.
Political Agent, North Waziristan	Mr. Sibghatullah Khan.
Political Agent, South Waziristan	Syed Darbar Ali Shah.

Rawalpindi Division

Commissioner	Syed Ghiasuddin Ahmad.
Deputy Commissioner, Rawalpindi	Mr. Ghulam Yazdani Malik.
Deputy Commissioner, Jhelum	Raja Ziaullah Khan.
Deputy Commissioner, Gujrat	Mr. Muhammad Aslam Bajwa.
Deputy Commissioner, Shahpur	Mr. Allauddin Ahmad.

Lahore Division

Commissioner	Mr. B. A. Kureshi.
Deputy Commissioner, Lahore	Mr. Rifat Pasha Shaikh.
Deputy Commissioner, Sheikhupura	Mr. Izhar-ul Haque.
Deputy Commissioner, Gujranwala	Mr. Muhammad Hayat Khakwani.
Deputy Commissioner, Sialkot	Mr. Fazal-ur Rehman Khan.

Multan Division

Commissioner	Mr. A. M. K. Leghari.
Deputy Commissioner, Multan	Mr. Mukhtar Masood.
Deputy Commissioner, Montgomery	Mr. Aslam Avais.
Deputy Commissioner, Lyallpur	Mr. Muhammad Said.
Deputy Commissioner, Jhang	Nawabzada Muhammad Yaqub Khan.

Bahawalpur Division

Commissioner	Mr. M. H. Zuberi.
Deputy Commissioner, Bahawalpur	Mr. M. S. Chaudhry.
Deputy Commissioner, Bahawalnagar	Mr. M. H. Rizvi.
Deputy Commissioner, Rahimyarkhan	Mr. Muhammad Mohsin.
Deputy Commissioner, Muzaffargarh	Ch. Sultan Muhammad.
Deputy Commissioner, Dera Ghazi Khan	Malik Karam Dad Khan.

Khairpur Division

Commissioner	Mr. A. H. Khan.
Deputy Commissioner, Khairpur	Mr. Maftoon Ahmad.
Deputy Commissioner, Jacobabad	Mr. Masood Nabi Nur.
Deputy Commissioner, Sukkur	Mr. A. B. Uquaili.
Deputy Commissioner, Larkana	Ghulam Mustafa A. W. Kazi.
Deputy Commissioner, Nawabshah	Mr. S. Karim-ur-Rahim.

Hyderabad Division

Commissioner	Mr. Niaz Ahmad.
Deputy Commissioner, Hyderabad	Mr. Abu Nasar.
Deputy Commissioner, Thatta	Mr. Muhammad Yusif Junejo.
Deputy Commissioner, Dadu	Mr. Muhammad Soomar Memon.
Deputy Commissioner, Tharparkar at Mirpurkhas	Mr. Mahmood Iqbal.
Deputy Commissioner, Sanghar	Mr. Saeed Ahmad.

Quetta Division

Commissioner	Lieut-Colonel Ibne Hassan.
Political Agent, Quetta	Mr. Jamil Ahmad.
Political Agent, Zhob	Mr. Jawaid Ahmad Mirza.
Political Agent, Loralai	Mr. Iqbal Masood.
Political Agent, Sibi	Mr. Muhammad Zia-ud Din Khan.

Kalat Division

Additional Commissioner	Mr. Muhammad Jan Khan.
Political Agent, Chagai	Sh. Ahmad Khan.
Deputy Commissioner, Kalat	S. Muhammad Hussain.
Deputy Commissioner, Las Bela	Haji Muhammad Siddique.
Deputy Commissioner, Mekran	Malik Muhammad Waris.
Deputy Commissioner, Kharan	Mr. Jehangir Shah.

AREA AND POPULATION

Area, Populati on by Sex and Density of Population*

Division	Area in sq. miles	POPULATION IN '000'			Population per sq. mile
		Male	Female	Total	
Peshawar ..	27,436	2,669	2,419	5,088	184
Dera Ismail Khan ..	21,226	1,111	974	2,085	98
Rawalpindi ..	11,855	2,056	1,823	3,879	327
Lahore ..	9,119	2,887	2,453	5,340	586
Multan ..	16,761	3,712	3,241	6,953	415
Bahawalpur ..	32,443	1,736	1,469	3,205	98
Khairpur ..	20,449	1,422	1,164	2,586	126
Hyderabad ..	35,998	1,287	1,055	2,342	65
Quetta ..	35,027	330	255	585	14
Kalat ..	98,975	314	275	589	6
West Pakistan (excluding Karachi.)	309,424	17,524	15,129	32,653	105

Estimated population (Mid-July 1959) — 35·5 Millions

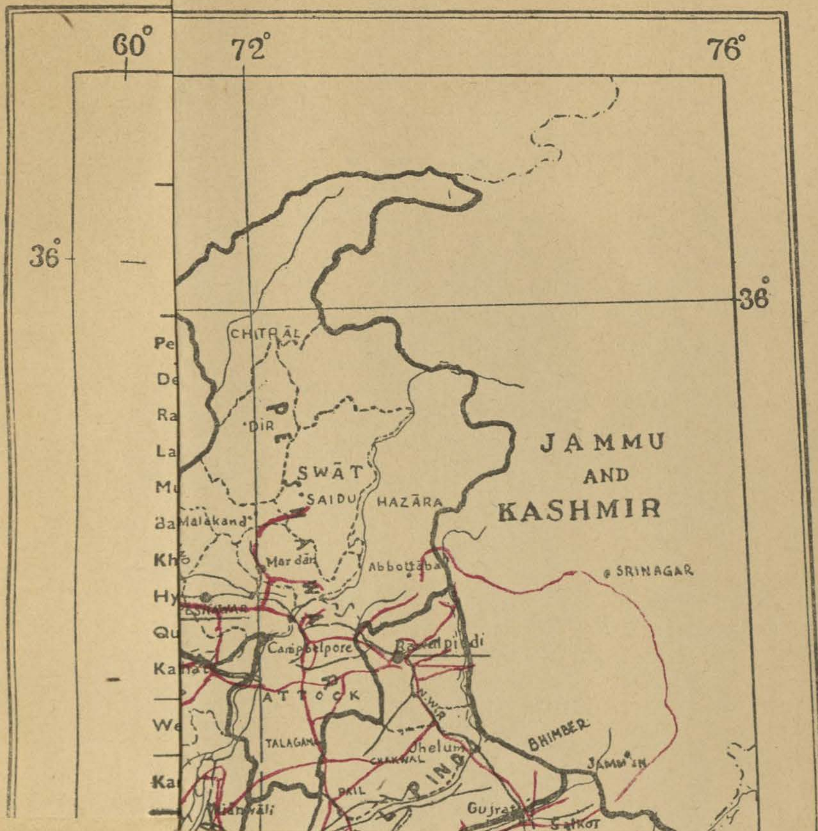
Percentage of Population by Religion*

Muslims	..	..	97·1
Christians	..	..	1·3
Scheduled Castes	..	..	1·1
Caste Hindus	..	..	·5

*Figures relate to 1951 census.

DISTRICTS AND DIVISIONS

1. Peshawar	1. Peshawar. 2. Hazara. 3. Mardan. 4. Campbellpur. 5. Malakand Agency (including the Fronti states of Dir, Swat and Chitral). 6. Mohmand Agency. 7. Khyber Agency.
2. Dera Ismail Khan	1. Dera Ismail Khan. 2. Bannu. 3. Kohat. 4. Mianwali. 5. North Waziristan Agency. 6. South Waziristan Agency. 7. Kurram Agency.
3. Rawalpindi	1. Rawalpindi. 2. Jhelum. 3. Gujrat. 4. Shahpur.
4. Lahore	1. Lahore. 2. Sheikhupura. 3. Gujranwala. 4. Sialkot.
5. Multan	1. Multan. 2. Jhang. 3. Lyallpur. 4. Montgomery.


60°
72°
76°
36°
36°
CHITRĀL
DIR
SWĀT
SAIDU
HAZĀRA
JAMMU
AND
KASHMIR
Malakand
Mardān
SRINAGAR
Campbelpore
ATTOCK
TALAGANG
Jhelum
CHAKWAL
BHIMBER
Gujrat

6. Bahawalpur	1. Bahawalpur. 2. Bahawalnagar. 3. Rahimyarkhan. 4. Dera Ghazi Khan. 5. Muzaffargarh.
7. Khairpur	1. Khairpur. 2. Jacobabad. 3. Sukkur. 4. Larkana. 5. Nawabshah.
8. Hyderabad	1. Hyderabad. 2. Thatta. 3. Dadu. 4. Tharparkar. 5. Sanghar.
9. Quetta	1. Quetta-Pishin. 2. Zhob Agency. 3. Loralai Agency. 4. Sibi Agency.
10. Kalat	1. Kalat. 2. Mekran. 3. Lasbela 4. Kharan. 5. Chagai Agency.

PERCENTAGE OF LITERACY

(1951 CENSUS)

Cities	Population	Percentage of Literates
Lahore*	894,333	36·2
Hyderabad*	241,801	21·6
Rawalpindi*	236,877	34·6
Multan*	180,122	36·1
Lyallpur	179,127	30·9
Sialkot*	167,506	43·4
Peshawar*	151,435	26·3
Gujranwala*	120,852	36·3
Quetta*	83,892	47·2
Sargodha	78,447	12·8
Sukkur	77,026	34·0
Jhang Maghiana	73,397	21·2
Mardan*	48,827	16·6
Shikarpur	45,335	26·6
Bahawalpur*	41,646	38·0
Dera Ismail Khan*	41,613	19·5
Kohat*	40,534	28·6
Mirpur Khas	40,412	25.2
Nawabshah	34,201	23·5
Larkana	33,247	35·5
Abbottabad*	27,602	44·6
Bannu*	27,199	22·6
Charsadda	27,048	11·2
Jacobabad	22,827	21·2
Dadu	13,716	36·6

*Cities including cantonment areas.

CLIMATE

Temperature at Selected Centres (1947 to 1957)

	Karachi (Manora)	Lahore	Multan	Rawalpindi	Peshawar	Quetta	Jacobabad
Height in feet above sea level.	13	702	413	1,676	1,155	5,490	183
Year				MEAN OF MAXIMUM			
1947 ..	84·1	91·6	93·7	86·5	86·5	75·1	96·4
1948 ..	84·2	88·6	91·7	84·1	84·1	74·5	94·1
1949 ..	85·1	89·4	106·7	84·5	84·4	73·3	94·0
1950 ..	84·0	86·6	93·4	83·1	82·8	71·8	92·8
1951 ..	84·6	89·3	91·4	84·9	84·7	73·9	95·0
1952 ..	84·7	90·5	92·0	85·7	85·4	74·9	95·1
1953 ..	85·8	90·5	92·7	86·7	85·8	76·1	95·6
1954 ..	84·9	89·1	91·7	84·7	84·8	74·0	94.3
1955 ..	86·3	87·7	90·8	86·0	85·2	74·8	94·0
1956 ..	85·3	87·7	90·4	84·2	84·8	73·8	94·1
1957 ..	84·9	86·0	89·4	80·6	82·6	71·3	92·0
				MEAN OF MINIMUM			
1947 ..	72·6	64·1	67·5	60·8	62·0	43·4	66·9
1948 ..	72·8	63·4	66·4	58·9	61·1	44·1	68·1
1949 ..	72·6	72·7	77·0	58·0	60·3	43·4	66·8
1950 ..	71·4	61·7	67·1	56·2	58·7	41·5	66·2
1951 ..	72·5	63·1	66·1	58·1	60·1	43·4	67·4
1952 ..	72·7	63·0	66·3	58·3	60·8	43·8	67·5
1953 ..	73·9	64·5	69·2	59·4	62·2	46·0	69·2
1954 ..	72·9	63·6	66·2	58·3	60·5	43·7	68·2
1955 ..	72·3	63·1	59·8	56·5	61·0	45·1	68·3
1956 ..	71·6	63·7	69·6	57·8	61·0	44·3	68·7
1957 ..	71·7	62·4	64·1	54·9	59·6	43·7	67·9

Temperatures are in Fahrenheit.

CLIMATE

Rainfall at Selected Centres (1947 to 1957)

	Karachi (Manora)	Lahore	Multan	Rawalpindi	Peshawar	Quetta	Jacobabad
Height in feet above sea level ..	13	702	413	1,676	1,155	5,490	183
1947 ..	2·33	11·99	0·91	15·47	8·13	7·90	0·66
1948 ..	5·59	29·07	5·80	58·84	12·02	6·30	6·05
1949 ..	12·74	11·57	N.-A.	34·17	8·70	7·97	7·91
1950 ..	3·38	28·84	N-.A.	45·01	14·01	10·72	1·99
1951 ..	1·67	15·58	8·80	30·39	10·49	9·19	1·77
1952 ..	7·55	10·92	3·37	38·11	6·84	7·09	1·31
1953 ..	19·95	23·84	8·65	35·33	12·23	6·48	3·72
1954 ..	6·03	27·86	2·17	34·55	11·82	9·36	2·20
1955 ..	7·47	22·62	13·68	26·75	7·30	6·24	3·03
1956 ..	14·29	25·99	11·32	38·16	21·06	15·69	16·00
1957 ..	1·46	27·32	5·76	17·77	20·01	14·69	3·85

DISTANCES BETWEEN VARIOUS TOWNS IN WEST PAKISTAN

Lahore to Peshawar (279 miles)

Lahore to Gujranwala	..	..	42 miles
Gujranwala to Wazirabad	..	..	20 miles
Wazirabad to Gujrat	..	..	8 miles
Gujrat to Lalamusa	..	..	12 miles
Lalamusa to Jhelum	..	..	21 miles
Jhelum to Gujar Khan	..	..	43 miles
Gujar Khan to Rawalpindi	..	..	33 miles
Rawalpindi to Taxila	..	..	20 miles
Taxila to Hassanabdal	..	..	9 miles
Hassanabdal to Attock	..	..	33 miles
Attock to Nowshera	..	..	19 miles
Nowshera to Peshawar	..	..	27 miles

* * *

Nowshera to Saidu Sharif (Capital of Swat)	..	84 miles
Saidu Sharif to Bahrien	.. ..	45 miles
Bahrien to Kalam	.. ..	18 miles

Lahore to Kaghan Valley (253 miles)

Lahore to Rawalpindi	..	..	180 miles
Rawalpindi to Abbottabad	..	..	73 miles
Abbottabad to Balakot	..	..	45 miles
Balakot to Naran (Kaghan)	..	..	55 miles

Lahore to Karachi (814 miles)

Lahore to Montgomery	..	..	103 miles
Montgomery to Multan *via* Khanewal		..	105 miles
Multan to Muzaffargarh	..	..	25 miles
Muzaffargarh to Panjnad	..	..	60 miles
Panjnad to Ubauro	..	..	105 miles
Ubauro to Ghotki	..	..	40 miles
Ghotki to Rohri/Sukkur	..	..	40 miles
Sukkur to Hyderabad	..	..	212 miles
Hyderabad to Thatta	..	..	64 miles
Thatta to Karachi	..	..	65 miles

Lahore to Quetta (714 miles)

Lahore to Sukkur	..	..	478 miles
Sukkur to Habib Kot	..	..	17 miles
Habib Kot to Shikarpur	..	..	9 miles
Shikarpur to Jacobabad	..	..	26 miles
Jacobabad to Sibi	..	..	96 miles
Sibi to Mach	..	..	47 miles
Mach to Spezand	..	..	26 miles
Spezand to Quetta	..	..	15 miles

HEALTH

NUMBER OF HOSPITALS AND DISPENSARIES IN 1959

Division	Hospitals	Dispensaries	Total
Peshawar ..	55	151	206
Dera Ismail Khan ..	59	109	168
Rawalpindi ..	35	110	145
Lahore ..	41	168	209
Multan ..	56	181	237
Bahawalpur ..	38	104	142
Khairpur ..	16	83	99
Hyderabad ..	19	107	126
Quetta ..	18	31	49
Kalat ..	4	37	41
Total ..	341	1081	1422

Number of maternity homes and child welfare centres ..	265
umber of registered practitioners	4415
Number of medical teaching institutions	8
Number of students admitted annually to these institutions ..	415

SMALL INDUSTRIES—EMPLOYMENT OF LABOUR AND WAGES PAID

Industry	Units	Average Number of Workers				Annual Wages paid (in 00,000 rupees)			
		1954	1955	1956	1957	1954	1955	1956	1957
1. Fruit Preservation ..	37	300	366	481	517	·92	1·12	1·29	1·27
2. Confectionery ..	31	255	326	358	438	·96	1·24	1·37	1·84
3. Oil Milling ..	9	6	30	104	120	·19	·33	·59	·69
4. Tea Blending ..	3	33	37	38	41	·14	·16	·96	·17
5. Soft Drinks ..	7	54	74	161	161	·31	·45	·80	·91
6. Bidi ..	561	9,137	12,965	15,379	18,244	59·56	81·04	103·75	121·84
7. Snuff ..	4	213	222	229	228	·88	·99	1·03	·94
8. Cotton Cloth ..	1,364	118,425	136,694	145,052	140,843	279·39	419·03	420·13	437·43
9. Woollen Cotton ..	8	162	184	191	178	·91	·91	·95	·93
10. Silken Cloth ..	7	207	193	196	197	1·27	1·27	1·18	1·45
11. Art Silk ..	517	22,637	24,593	25,023	27,385	109·57	122·32	121·24	130·70
12. Carpets and Rugs ..	31	201	275	452	1,332	1·59	2·26	3·69	8·94
13. Bleaching and Dyeing ..	110	1,639	2,017	2,448	2,704	7·81	10·22	12·32	14·82
14. Hosiery ..	144	4,019	4,602	5,364	6,062	27·64	22·50	24·74	28·24
15. Thread and Thread Ball	41	973	1,272	1,302	1,239	3·86	6·48	6·36	5·98
16. Tilla and Zari ..	16	170	185	210	321	1·43	1·48	1·71	2·26
17. Footwear ..	68	924	1,225	1,628	2,224	·24	·78	·68	1·49
18. Ready-made garments ..	33	217	305	548	701	1·95	2·18	2·87	3·51
19. Furniture ..	36	344	428	530	617	3·96	3·12	3·83	4·46

20. Printing ..	16	273	298	313	377	1·38	1·85	1·94	2·75
21. Leather Tanning ..	4	238	251	261	282	1·25	1·34	1·45	1·53
22. Leather Products ..	16	101	159	150	198	1·05	1·55	1·68	1·38
23. Rubber Products ..	5	33	40	40	64	·06	·16	·15	·17
24. Polishes ..	10	77	79	87	113	·42	·42	·48	·55
25. Pharmaceuticals ..	24	89	125	171	224	·55	·75	1·05	1·24
26. Perfumes and Cosmetics	41	250	337	419	507	1·06	1·44	1·88	2·56
27. Soaps ..	115	615	778	962	1,344	2·87	3·68	4·54	6·24
28. Glass Bangles ..	8	124	139	156	310	·85	1·62	1·75	1·11
29. Pottery ..	20	166	227	273	540	·65	1·07	1·23	2·28
30. Cutlery ..	12	63	85	100	401	·25	·40	·49	2·45
31. Locks and Padlocks ..	8	106	89	95	125	·62	·68	·61	·82
32. Brass and Copper ware	9	119	143	197	223	·57	·72	·82	1·19
33. Barrels, Buckets, Trunks, etc.	59	620	597	797	1,531	4·68	4·35	4·26	9·97
34. Tin Cans and Boxes ..	13	68	72	74	82	·42	·46	·49	·82
35. Agricultural Implements	11	143	198	247	367	·74	·90	·79	1·24
36. Oil engine spares ..	2	22	20	24	42	·06	·05	·07	·09
37. Machine Tools ..	8	11	11	16	38	·01	·01	·04	·18
38. Sewing Machines ..	3	30	31	33	60	·33	·33	·35	·38
39. Electric Fans ..	2	19	19	19	19	·16	·16	·16	·16
40. Electric Accessories ..	4	21	37	42	63	·09	·27	·26	·47
41. Electric Wires ..	3	14	14	21	44	·09	·03	·02	·35
42. Motor Parts ..	6	8	8	10	44	·06	·06	·09	·24

SMALL INDUSTRIES—EMPLOYMENT OF LABOUR AND WAGES PAID—contd.

Industry	Units	Average Number of Workers				Annuhl Wages paid (in 00,000 rupees)			
		1954	1955	1956	1957	1954	1955	1956	1957
43. Truck Bodies ..	3	11	16	40	43	·07	·10	·12	·14
44. Cycle Parts ..	5	212	231	171	221	·22	·31	·34	·38
45. Surgical Instruments ..	5	218	237	260	351	·14	·14	·29	·33
46. Mathematical Instruments	2	23	27	29	32	·22	·24	·27	·30
47. Sports Goods ..	44	875	1,012	1,137	1,336	5·34	5·96	7·92	8·65
48. Plastic Goods ..	22	39	85	149	214	·28	·45	·71	1·10
49. Stationery Articles ..	25	361	407	485	555	1·75	2·00	2·57	3·30
50. Gold Jewellery ..	9	210	225	234	252	2·26	2·52	2·52	2·74

FOREIGN TRADE

Foreign Trade of West Pakistan (1947-1958)

(Figures in thousands of rupees)

Year	Imports	Exports
1947 (15th August to 31st December)	80,182	102,399
1948	864,744	584,692
1949	1,173,456	647,734
1950	994,777	766,925
1951	1,238,384	1,240,836
1952	1,420,430	992,949
1953	899,661	797,446
1954	779,038	527,984
1955	794,858	639,006
1956	1,305,536	653,343
1957	1,352,797	666,565
1958	1,202,613	410,151

(*a*) Data on trade with India are included since April, 1948 because of the standstill agreement up to March, 1948.

(*b*) Data on exports to Afghanistan are included since January, 1948, whereas data on imports from Afghanistan are included from March, 1951.

(*c*) Data on land-borne trade with Iran are included since January, 1948.

AGRICULTURE

Area and Production of Principal Crops 1947-48 to 1957-58*

Crops	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58
					AREA (IN 000 ACRES)						
Food Crops—											
1. Rice ..	1,954	2,075	2,305	2,395	2,181	2,242	2,513	2,368	2,397	2,400	2,727
2. Wheat ..	9,771	10,591	10,336	10,799	10,144	9,431	10,426	10,530	11,187	11,596	11,708
3. Bajra ..	1,998	2,330	2,368	2,406	2,018	2,212	2,584	2,191	2,203	2,281	1,877
4. Jowar ..	1,053	1,182	1,362	1,254	1,090	1,316	1,513	1,125	1,325	1,358	921
5. Maize ..	899	945	990	935	969	969	1,062	1,062	1,061	1,026	1,079
6. Barley ..	414	573	497	430	434	482	518	450	474	455	572
7. Gram ..	2,180	2,797	2,399	2,757	2,110	2,033	2,562	3,045	3,248	3,150	3,111
Cash Crops—											
8. Sugarcane ..	466	483	543	470	475	627	721	750	709	780	980
9. Rape and Mustard ..	991	1,049	908	1,138	1,365	1,038	1,078	1,276	1,456	1,358	1,410
10. Cotton ..	3,048	2,598	2,744	3,107	3,318	3,421	2,870	3,136	3,486	3,530	3,592
11. Tobacco ..	29	38	41	51	54	42	61	110	78	71	88
					PRODUCTION (IN 000 TONS)						
Food Crops—											
1. Rice (1) ..	648	735	793	852	722	816	907	821	821	820	889
2. Wheat ..	3,301	3,974	3,862	3,930	2,949	2,366	3,575	3,136	3,314	3,582	3,637

3. Bajra ..	296	394	371	385	266	267	462	347	341	362	281
4. Jowar ..	202	242	269	243	204	220	278	219	249	254	174
5. Maize ..	353	374	401	381	376	346	402	424	452	447	445
6. Barley ..	111	175	145	129	100	92	127	105	126	114	161
7. Gram ..	466	755	601	744	423	315	562	594	697	682	653
Cash Crops—											
8. Sugarcane (2) ..	572	702	771	551	536	722	882	872	807	873	1 ,082
9. Rape and Mustard ..	173	184	143	195	205	123	163	219	221	219	232
10. Cotton (3) ..	194	169	217	244	245	312	249	277	302	298	295
11. Tobacco ..	15	18	25	30	35	26	38	73	48	46	56

*Corrected up to 1st February 1958.

(1) Production in terms of husked rice.

(2) Production in terms of raw sugar (*Gur*).

(3) Production in terms of lint cotton.

LAND UTILIZATION

LAND UTILISATION OF REPORTED AREAS BY DIVISION AND DISTRICT [1]

1956-57

(In thousands of acres)

Division and District	Total acreage	Cultivated area			Uncultivated area			
		Total	Net sown	Current fallows[2]	Total	Culturable waste [3]	Forests	Not available for cultivation[4]
Total for West Pakistan (reported) ..	115,823	39,533	31,197	8,336	76,290	22,600	3,148	50,541
Peshawar Division ..	6,292	2,747	2,459	288	3,546	1,452	400	1,692
Peshawar ..	975	461	392	69	514	226	26	262
Hazara ..	1,943	571	506	65	1,373	990	162	220
Mardan ..	700	571	505	66	129	41	5	83
Attock ..	2,674	1,144	1,056	88	1,530	195	207	1,127

Dera Ismail Khan Division ..	8,532	3,111	2,693	418	5,421	2,573	59	2,789
Kohat ..	1,721	348	306	42	1,373	189	8	1,170
Bannu ..	1,072	508	479	29	564	252	*	312
Dera Ismail Khan ..	2,213	646	511	135	1,567	1,025	10	533
Mianwali ..	3,436	1,544	1,337	207	1,892	1,100	41	751
Tribal Area ..	88	64	60	5	24	7	*	17
Rawalpindi Division ..	7,613	4,361	4,000	362	3,252	1,052	623	1,577
Rawalpindi ..	1,313	578	549	30	734	159	212	364
Jhelum ..	1,771	761	700	61	1,010	141	226	643
Shahpur ..	3,071	1,962	1,729	243	1,100	604	130	365
Gujrat ..	1,458	1,050	1,022	28	408	148	55	205
Lahore Division ..	5,699	3,939	3,591	349	1,758	1,003	53	701
Sialkot ..	1,317	1,063	1,003	60	253	54	28	171
Gujranwala ..	1,474	958	869	90	515	328	2	185
Sheikhupura ..	1,480	918	839	79	562	421	5	136
Lahore ..	1,428	1,000	880	120	428	200	18	209
Multan Division ..	10,790	7,458	6,794	664	3,332	2,221	51	1,061
Montgomery ..	2,700	1,959	1,751	208	741	425	18	298
Lyallpur ..	2,249	1,756	1,638	118	493	370	*	186
Jhang ..	2,174	1,233	1,111	122	941	698	14	230
Multan ..	3,667	2,510	2,294	216	1,157	791	19	347

LAND UTILIZATION—contd.

(In thousands of acres)

Division and District	Total acreage	Cultivated area			Uncultivated area			
		Total	Net sown	Current fallows [2]	Total	Culturable waste [3]	Forest	Not available for cultivation[1]
Bahawalpur Division ..	11,746	4,923	4,221	700	6,825	4,239	102	2,484
Muzaffargarh ..	3,561	909	788	121	2,653	1,984	77	592
Dera Ghazi Khan ..	3,476	1,009	760	248	2,467	1,422	10	1,035
Bahawalpur ..	1,223	706	625	81	517	211	3	303
Bahawalnagar ..	1,735	1,154	1,051	102	581	292	1	288
Rahimyarkhan ..	1,751	1,145	997	148	607	330	11	266
Khairpur Division ..	9,156	4,259	2,781	1,478	4,897	1,085	416	3,396
Khairpur ..	1,032	453	391	62	579	208	4	367
Jacobabad ..	1,355	847	522	325	508	172	24	312
Sukkur ..	3,635	1,181	602	578	2,454	329	279	1,846
Nawabshah ..	1,684	1,008	667	241	676	140	69	467
Larkana ..	1,450	770	499	272	680	236	40	404

Hyderabad Division—	22,013	7,501	4,154	3,347	14,512	4,494	290	9,728
Sanghar ..	2,620	999	578	421	1,621	326	16	1279
Tharparkar ..	6,768	2,727	1,720	1,007	4,041	900	3	3,138
Dadu ..	4,400	1,217	555	662	3,183	928	40	2,215
Hyderabad ..	2,846	1,741	936	805	1,105	838	76	191
Thatta ..	5,379	817	365	452	4,562	1,502	155	2,905
Quetta Division	21,547	1,129	493	636	20,418	961	255	19,202
Kalat Division	12,435	105	11	94	12,330	3,520	899	7,911

* Less than 500 acres.

1. The data reported on land utilization covers approximately three-fifths (59%) of West Pakistan's 198 million acres. Areas for which data are not reported are primarily (1) the non-arable lands of province and (2) the Tribal Areas, the largest non-reporting areas being in the divisions of Kalat (50 million acres), Bahawalpur (9 million acres), Khairpur (3 million acres) and Hyderabad (2 million acres), and the tribal areas of Peshawar (11 million acres) and Dera Ismail Khan (5 million acres).

2. *Current fallows* comprise land not cultivated during specified year, which was cultivated for at least one harvest during the preceding four harvests. Land left uncultivated for four harvests is included in "Culturable Waste".

3. *Culturable waste* comprises the land, except current fallows, which was available for cultivation but which was not actually cultivated.

4. *Not available for cultivation* includes barren or mountainous land and that area which is under roads, canals, rivers, sites of villages and houses and all such areas as are devoted to uses other than agriculture.

5. The land utilization statistics are for the year 1955-56.

6. The figures shown as uncultivated areas are for 1954-55.

7. The figures shown as uncultivated area are for 1953-54.

8. The land utilization statistics for Quetta and Kalat are for the year 1948-49 and have been taken from 'Crops Vegetables Fruit in Pakistan' published by the Ministry of Agriculture, Government of Pakistan, in May, 1955.

Source—Statistics of West Pakistan (Agricultural Data) published by the Bureau of Statistics.

EDUCATION

(a) Primary Education

Period	Number of Schools	Number of Students
1948-49	8,331	529,840
1949-50	9,804	646,347
1950-51	11,201	777,166
1951-52	12,522	932,760
1952-53	14,073	1,143,075
1953-54	16,093	1,266,986
1954-55	17,773	1,337,212
1955-56	15,917	1,307,823
1956-57	15,483	1,331,610
1957-58	16,558	1,341,541

(b) Secondary Education (Middle Schools)

Period	Number of Schools	Number of Students
1948-49	2,186	307,254
1949-50	2,232	347,390
1950-51	2,252	380,169
1951-52	2,095	370,801
1952-53	1,527	318,539
1953-54	1,587	330,915
1954-55	1,652	350,183
1955-56	1,713	364,071
1956-57	1,759	367,064
1957-58	1,852	360,743

(c) Secondary Education (High Schools)

Period	Number of Schools	Number of Students
1948-49	373	197,479
1949-50	436	229,128
1950-51	507	259,056
1951-52	548	277,678
1952-53	594	299,437
1953-54	644	330,992
1954-55	687	372,622
1955-56	755	395,007
1956-57	805	417,730
1957-58	853	428,309

Source: Bureau of Education, Lahore.

COLLEGE EDUCATION

(SESSION 1957-58)

Region	No. of Colleges	No. of Students
Male Colleges		
(a) *Arts and Science Colleges—*		
Peshawar	17	9,264
Lahore	25	21,892
Hyderabad	15	5,313
Quetta	1	568
Total	58	37,037
(b) *Professional Colleges—*		
Peshawar	5	700
Lahore	11	4,772
Hyderabad	10	1,726
Quetta	..	..
Total	26	7,198
Female Colleges		
(a) *Arts and Science Colleges—*		
Peshawar	5	1,110
Lahore	11	4,227
Hyderabad	2	264
Quetta	1	102
Total	19	5,753
Professional Colleges		
(b) *Professional Colleges—*		
Peshawar	1	32
Lahore	3	922
Hyderabad	..	..
Quetta	..	..
Total	4	954

Source: Bureau of Education, Lahore.

EDUCATION

(Frontier Regions)

Northern Zone	1947-48			1958-59		
	Boys	Girls	Total	Boys	Girls	Total
Primary Schools ..	59	1	60	343	23	366
Middle Schools ..	9	*Nil*	9	36	3	39
High Schools ..	2	*Nil*	2	13	*Nil*	13
Colleges ..	*Nil*	*Ni*	*Nil*	1	*Nil*	1
Students ..	5,982	20	6,002	34,000	800	34,800

CO-OPERATION

Consumer Stores

Division	Number	Membership	Working capital (in 000)	Purchase (in 000)	Sale (in 000)
Peshawar and D. I. Khan ..	26	3,307	1019	1183	1285
Rawalpindi ..	33	4,146	285	513	514
Lahore ..	69	8,774	490	1628	1609
Multan ..	25	2,558	293	174	228
Bahawalpur ..	12	1,048	45	106	102
Khairpur ..	20	1,736	422	..	13
Hyderabad ..	22	493	42	..	..
Quetta ..	39	2,854	388	684	445
Kalat ..	10	258	86	301	195
Total ..	256	25,174	30·70	4589	4391

COMMUNICATIONS

Motor Vehicles (Government and Private) on Roads on 31st December 1958

Type of Vehicle	Total	Government and Local Bodies	Private
Total for the province ..	38,604	6,817	31,787
Motor Cycles	4,855	245	4,610
Motor Cars and Station Wagons	15,680	1,062	14,618
Jeeps	2,492	814	1,678
Taxi Cabs	841	19	822
Buses	5,189	1,795	3,394
Public Carriers	4,154	182	3,972
Private Carriers	4,230	2,116	2,114
Other Vehicles	1,163	584	579

Source—Director, Excise and Taxation, West Pakistan.

RADIO LICENCES

Issued In West Pakistan from 1952 to 1957.

Year	Total	Southern Circle (b)	Northern Circle (c)
1952	67,325	25,066	42,259
1953	84,892	30,691	54,201
1954	88,423	35,241	53,182
1955	106,748	48,012	58,736
1956	129,586	53,156	76,430
1957	123,164	55,580	67,584

(a) Listeners' licences issued by the Posts and Telegraphs Department.

(b) Southern Circle includes old provinces of Karachi, Sind, Khairpur State, Baluchistan and Baluchistan States Union.

(c) Northern Circle includes old provinces of Punjab, NWFP and Bahawalpur State.

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